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EDITOR'S NOTE

The Publications Committee of the Fiftieth Anniversary Celebration of the Ohio Academy of Science presents herewith further material relevant to the Celebration. This material includes a brief history of the Academy, prepared by the Historian, Mr. William Alexander. The history is followed by a series of plates portraying the charter members of the Academy, and the officers of the Academy at the time of the Celebration. The collection and arrangement of these pictures is due to the tireless work of the Academy librarian, Mrs. Ethel Miller.

Because of the change in method of election of section officers and the coincident change in the Secretaryship, the Proceedings of the Fifty-first Meeting have been delayed and will be printed in a later issue.

THE OHIO ACADEMY OF SCIENCE

(Mostly Historical)

WILLIAM H. ALEXANDER,
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Part One. Descriptive

The story of Science in its simple, literal meaning, "ordered knowledge of natural phenomena," is a very old, a very long, and at the same time an intensely interesting one. Ancient man of necessity began very early to observe the natural phenomena about him and much of the knowledge thus gained has come down to us, often in the form of "myths," but after all a myth is simply man's earliest effort to *explain* some natural phenomenon. And even now, with all our boasted knowledge, we find ourselves "entangled in the web of existence, and we cannot get out of it, even for a brief moment, to see what the web is like." Furthermore, as we follow the course of Science through the years, we come upon many discarded theories, many abandoned organizations, for no sooner is a scientific theory advanced than an organization for its defense and promulgation appears. And while theories and organizations may come and go, Science Marches On! However interesting and profitable it unquestionably would be to follow the march of Science through the ages, our immediate concern is with a very, very tiny portion of it that began right here in Ohio some fifty years ago, namely, the *Ohio Academy of Science.*

Going back, let us say, to the year 1890, what do we find in the field of science?—A large number of *local scientific groups*, clubs, societies, etc., at least as many as there were colleges and universities, and probably more, all more or less unrelated, disconnected and independent of each other. Beneficial? Useful? Certainly they were serving a definitely useful purpose but in the fertile brain of one William R. Lazenby, at that time a professor at Ohio State University, the belief that the best interests of science and scientists would be served by a state-wide organization took deep and permanent root. This

idea flowered forth on November 3, 1891, in an earnest, almost prophetic appeal to his fellow scientists and to the members of the Biological Club of the Ohio State University of which Club he was then president, to the effect that immediate steps should be taken looking toward the organization of an *Ohio Academy of Science.* The appeal bore fruit at once and a committee of three (D. S. Kellicott, W. A. Kellerman, W. R. Lazenby) was appointed by the Biological Club, with instruction to proceed at once to carry out the suggestions of its president, and to call an organization meeting at the earliest possible date. So after some two months had been spent canvassing the field, the committee felt the time propitious and therefore issued the call. Accordingly, one bleak December day, December 31, 1891, at 2:00 P. M., to be exact, a group of earnest, forward-looking, determined men met in the old Central High School building, corner Broad and Sixth streets, Columbus, and bravely, wisely tackled the job assigned to them, namely, the organization of an Ohio Academy of Science. How well they builded, let the record of the past fifty years bear witness!

Unfortunately space will not permit an extended discussion of the personnel of this notable group! Truly some great spirits were there, as shown not only by what they did at the time, but by their achievements since that historic date. The pathway of some led them to great eminence in the greatest institutions of learning in the land, such as Princeton, Columbia, and Vassar. What fine lives they have led! How fortunate we are to have among us today at least nine of these honored names! (See Exhibit 1.) Look on these faces!

At this point it seems appropriate to make one or two rather extended quotations from one of the chief actors in the chain of events we are trying to portray, since these will throw further light on the character and wisdom of the fathers of the Ohio Academy of Science. First, a few words from the appeal of William R. Lazenby to the Biological Club on November 3, 1891, advocating the organization of a state academy:

"There is need of one institution in Ohio to the organization of which our club should direct its combined energy and influence. This is a state academy of science. If local clubs and societies of science are beneficial, the reasons that make them so apply with greater force to a state organization. Who can estimate the inspiration, the stimulus to research and investigation that such an institution would provoke? * * * Once organized, I am sure the Ohio Academy would be a signal

and all-inspiring success, and could scarcely fail to secure an honored position among scientific organizations of our country."

Twenty-five years later he wrote these words:

"Our annual meetings have confirmed and strengthened a spirit of good will between the educational institutions of the state. They have cultivated the amenities and developed a feeling of brotherhood among our members. Our academy has stood for good scholarship and good fellowship, and good citizenship. The essentials of a great landscape are unity and variety. These are likewise the great attributes of an association for the promotion of science. Unity in the spirit and ideals of the work to be accomplished, and variety, infinite variety, in the means by which these ideals may be developed. We come together on the basis of commanding interests and diverse experiences. This devotion to the varied phases of science detracts nothing from the pursuit of the older humanities, but adds materially to the effectiveness of any study that puts the student in closer touch with his environment, in closer touch with nature's laws."

What a masterful conception and statement of the functions of an organization! But back to our meeting on December 31, 1891.

Dr. A. M. Bleile was chosen temporary chairman and Prof. William R. Lazenby temporary secretary of the organization meeting. While a duly appointed committee was preparing a constitution for the new society, some ten papers selected from the 26 or more submitted were read and discussed. We note with pleasure that one of the ten papers read and discussed was by one of the nine now living charter members of the Academy, our own beloved and highly honored Joseph N. Bradford, on the subject, "Photography in Scientific Work." The list of papers prepared for this meeting shows a remarkable range of subjects.

The constitution formed and adopted at this first meeting gave to the new organization the name of the *Ohio State Academy of Science* and it was so designated until 1914 when the word "State" was dropped and the name became the *Ohio Academy of Science*, as at present. No material changes were made in the constitution until 1939 when the Council form of government was adopted.

The objects or purposes of the Academy as set forth in the constitution were two: (1) The promotion of scientific research; (2) The diffusion of knowledge concerning the various branches

of science. The Academy was incorporated under the laws of Ohio on March 12, 1892.

The first constitution made no provision for the organization of special groups or sections, covering special fields of scientific endeavor, but the objects of the Academy were very satisfactorily accomplished through general meetings, general programs and the discussion of topics of general interest down to and including the year 1907. In 1908 two sections, "Biology" and "Geology," were organized and the other sections came along about as shown in Exhibit 13. Thus at the end of the first half century we find an academy of approximately 500 members with ten live, wide-awake sections, the last but not least, certainly for long, being the Section of Junior Academy of Science. More about this later. It may be interesting at this time to note that during the fifty years covered by this discussion 3,829 papers and lectures were presented to the general and sectional meetings of the Academy. One can hardly imagine the variety to be found in this vast array of scientific lore.

Coming now more directly to the two distinct objects of the academy, the promotion of research and the diffusion of scientific knowledge, much might be said regarding the accomplishments of the academy during the past fifty years. Fortunately for the academy, among the stalwarts who cherished and nourished it in its infancy were those who gave generously both of their time and means. Outstanding among these was Mr. Emerson McMillin who, as early as 1898, inaugurated a fund in aid of research by a gift of $250.00, which sum he continued to give annually up to the time of his death in 1922. To the McMillin Fund were added from time to time certain allotments from life memberships, and, since 1937, annual contributions from the American Association for the Advancement of Science, so that, to date, approximately $6,000 has been given in aid of more than sixty projects. The McMillin grant has stimulated a good deal of activity which has continued through the years and furnished a fund, the income from which has made it possible to continue grants in aid of research after Mr. McMillin's death. We very much regret that space will not permit the publication of a complete list of the various projects aided from the research fund of the academy, especially as such a list is the only way of showing the wide range in the scientific field covered by the work of the academy. To quote

from the last report of the chairman of the Research Fund for the past several years, Dr. Herbert Osborn:

"It seems very evident from this record that the McMillin Fund has been exceptionally serviceable in the encouragement of research work. It is certain for some of these studies the small allowance for certain kinds of expense was the particular thing which made possible the carrying on of the studies, resulting in the preparation of matter which has been of distinct value to the science of the state, and often of interest outside of state borders. The nature of the grants has been indicated in some of the records given above, but it may be noted further that they have included expenses involved in field trips, especially for problems in geology, botany and zoology, for apparatus in chemistry and physics, and in some cases for publication where there was need in this direction."

The Trustees of the Research Fund have been rather liberal in their construction of the term "research" and have not hesitated to extend aid in the publication of the results of research projects where this was necessary to make the results available. In Exhibit 9 is given a list of 21 special papers the publication of which was sponsored by the academy and all these from 3 to 19 inclusive received aid from the research fund. In a few cases the trustees even granted aid in the purchase of necessary apparatus.

As to the diffusion of scientific knowledge, the academy has always made much of the "printed word." It has always had an "official organ"; first, the *Journal of the Cincinnati Society of Natural History*, and the technical series of *Bulletins of the Ohio Agricultural Experiment Station;* in 1903 the *Ohio Naturalist* became its official organ and remained so until 1915 when the *Ohio Journal of Science* was made the official organ, and still is. Of course the lecture platform is used by many members of the academy in the diffusion of scientific information and even the radio has come into general use.

This leads up to another very important method of dissemination of scientific facts generously used by the academy, and that is through a system of exchanges. See Exhibit 11 and note that the academy is now receiving some 800 publications annually from 153 domestic and 282 foreign exchanges. These are available not only to members of the academy but to all students of science. This fact taken in connection with the statement above that approximately 4,000 scientific lectures and papers have been delivered and read before the academy

during the last 50 years gives some idea as to what the academy is doing to spread the facts about science.

Reference has already been made to the organization of a Junior Academy of Science, designated as a section of the academy. The importance of this step warrants some further details, finally leading up to its consummation. The Ohio Academy of Science was by no means the first to organize a junior academy of science; in fact it has been a little slow. The agitation for a junior academy had its genesis at the Springfield meeting of the Ohio Academy, when on April 27, 1929, at the suggestion of the secretary, the following motion was approved by the academy:

> "That a committee of three be appointed by the president to consider the advisability and the ways and means of establishing facilities for encouraging junior scientific effort in Ohio and report with recommendation at the next annual meeting of the Academy."

Very appropriately, Dean Charles G. Shatzer of Wittenberg College was made chairman of that committee, and after three or four years of faithful effort the committee came to the conclusion that the time was not quite but almost ripe for the inauguration of a Junior Academy, and so reported to the Academy, with the recommendation that the matter be allowed to remain in abeyance until conditions seemed a little more propitious. This recommendation was approved and except for a little prodding now and then by the secretary no further serious effort was undertaken until 1939 when President Claude E. O'Neal revived the matter in real earnest. While little was actually accomplished during his administration other than "stirring the waters," fortunately he was succeeded by one equally as zealous for the project, namely, President William Lloyd Evans. Then, too, there arrived on the scene about this time the very man to head the committee charged with the arduous work of organizing the forces involved in the person of Prof. Charles W. Jarvis, of Ohio Wesleyan University. A more fortunate selection could scarcely have been made, as the results abundantly demonstrate. Assured of an efficient leadership, the Council gladly authorized, sponsored and actively supported a *trial junior academy meeting*, same to be held as a part of the semi-centennial celebration. The trial meeting was held on May 11, 1940, and was addressed by Dr. Otis W. Caldwell, General Secretary of the American

Association for the Advancement of Science, thereby adding considerable stimulus to the meeting.

Some 65 students from high schools well distributed over the state participated in this trial meeting, presenting some 67 papers in the fields of mathematics, physics, chemistry and biology. These papers were read, judged and rewarded. In addition to the papers, several very interesting demonstrations and quite an impressive array of exhibits were sponsored by the students. In short, the trial meeting was such an eminent success, even surprising the most sanguine expectations, that the Academy readily approved a recommendation of the Council that the Junior Academy be made a permanent organization as an integral part of the Senior Academy, same to be temporarily designated as a section of the Academy, practically self-governing with its own constitution, by-laws and officers. Of course Professor Jarvis was elected chairman, and Mr. Orval Linebrink secretary for the ensuing year.

Any history or "story" of the Ohio Academy of Science would be quite incomplete without some account of the Semi-Centennial Celebration, one if not *the* most important single event of the entire fifty years. At one time it was hoped ample space would be provided in which to do full justice to this truly great scientific event; to those who labored from one to four years in its accomplishment, giving freely of their time, talent and even means. In the opinion of some it is just here that the academy made its greatest mistake, or to use an old homely saying, more expressive, perhaps, than elegant, "The Academy swallowed the whole hog and then choked on the tail!" It looks, therefore, as if many of those who performed a noble, meritorious part in making the semi-centennial the success it undoubtedly was will have to be content with the *reward of the Unknown Soldier!* But even so, history insists that we be *fair*, be *just*, be *honest!* Silence in itself is not necessarily ethical, in fact may be just the opposite, even downright dishonest, especially if some one is thereby deprived of his justly merited share of praise. Therefore, at the risk of being severely criticized, for we are not unmindful of the risks involved when one begins to "call names," we propose to call a few names; truly wish we could call the entire roll.

The story of the semi-centennial of the Ohio Academy of Science had its inception in the meeting of the Executive Committee held in the New Secor Hotel in the City of Toledo

on April 9, 1936, when, at the suggestion of the secretary, it was voted to make the following recommendation to the Academy, viz.:

"That action be inaugurated at this meeting looking toward a suitable observance of the Fiftieth anniversary of the organization of the Academy four years hence and to this end the Committee suggests the appointment of a special committee on ways and means, to report at the next annual meeting of the Academy."

On the second day of the meeting (April 11), Dr. F. C. Waite, of Western Reserve University, referring to the foregoing recommendation, offered the following motion, which the Academy unanimously passed, viz.:

"That the incoming President appoint a preliminary committee of five on plans for the celebration of the 50th anniversary and that this committee be charged to make a definite report of plans at the meeting next year."

In compliance with this action of the Academy, President Charles A. Doan appointed the following persons on this special committee, viz.:

Frederick C. Waite, Herbert Osborn, Walter H. Bucher, William Lloyd Evans and the Secretary, chairman.

This committee became immediately active and by personal interviews and by correspondence invited suggestions from every source that seemed available to it at the time, and after a year of earnest, conscientious effort it came to the next annual meeting (May 14, 1937) with the following preliminary report, viz.:

Report of the Preliminary Committee on 50th Anniversary of the Ohio Academy of Science

COLUMBUS, OHIO, May 14, 1937.

To the Ohio Academy of Science:

Your Committee appointed by President Doan, pursuant to a motion passed at the Toledo meeting of April, 1936, submits the following report:

We heartily commend the celebration of the semi-centennial of the *Ohio Academy of Science* and believe that this should be done in a distinctive and comprehensive manner that will not only commemorate what has been accomplished in the past fifty years, but will also stimulate yet greater endeavor in the future. We hope that the program will be sufficiently worthy that the proceedings when published will be a real contribution to the literature of science and of scientific organizations.

To this end we make the following recommendations:

1. That the 50th Annual Meeting be held at the Ohio State University in Columbus, the birthplace of the Academy, in 1940, the month and days to be designated later.

2. That the meetings of 1938 and 1939 be held elsewhere than in Columbus.

3. That the 50th meeting be devoted entirely to the semi-centennial celebration, consisting of two major parts, one *historical* and the other *scientific*.

4. That the meeting be organized and carried through by a Director and ten committees.

5. That the Director have general supervision of the entire celebration and be ex-officio a member of each committee.

6. That the Nominating Committee for the 1938 meeting present one or more suggestions for the position of Director and that their suggestion or suggestions for this position be announced at the first business session of the meeting of 1938 and voted on at the final session of that meeting.

7. That the committees be grouped into two groups on the basis of the sequence of their activities.

8. That each committee consist of not more than three members, and that not more than one honorary member may be, but not of necessity must be, added to each committee.

9. That the committees be as follows:

GROUP A

(1) On Publicity, both preliminary and current.
(2) On Program.
(3) On Speakers, including guests.
(4) On Invitations.
(5) On Historical Statistics and Lists.

GROUP B.

(6) On Exhibits.
(7) On Memorials.
(8) On Dinner.
(9) On Finances.
(10) On Publications.

10. That the Executive Committee choose and appoint at least the chairman of each of the five committees in Group A, not later than December 1, 1937, with the expectation that a preliminary report from these five chairmen will be presented at the 1938 meeting.

11. That the completion of all committees be accomplished not later than December 1, 1938, and that all committees report either separately or through a general report by the Director at the 1939 meeting.

Respectfully submitted with the understanding that when amended

and adopted the carrying out of these recommendations be the duty of the officers and executive committee of the Academy.

(Signed) W. H. Alexander, *Chairman*,
F. C. Waite,
Herbert Osborn,
Walter H. Bucher,
Wm. Lloyd Evans,

The preliminary report with its various recommendations apparently met with the hearty approval of the Academy and the new President, Dr. Claude E. O'Neal, of Ohio Wesleyan University, devoted himself with unusual zeal, tact and foresight to the numerous problems involved in the project. His first great concern was, of course, to find a suitable Director. After a most careful, thorough canvass of the field, all signs seemed to point to the late beloved Dean of the Graduate School at Ohio State University, Prof. George F. Arps, and with remarkable unanimity the Academy turned to him for leadership. Tactfully approached regarding the matter by President O'Neal and his supporting officers the beloved Dean graciously accepted the office of Director of the Semi-Centennial, and everybody was more than happy, for Dean Arps was known to be a past master in such matters. For a time all went well. Rapid progress was made by the Director and the President in the appointment of committees, the development of the details of a most ambitious celebration, the raising of the necessary funds, and so forth, when lo, tragedy entered! The "grim reaper" came and removed our trusted leader! The blow was staggering. Confusion ensued for a time. To whom could we now turn? When, lo, Providence entered!

About this time Dr. William Lloyd Evans, of Ohio State University became President of the Academy. He was one of those who had worked out the preliminary plans for the celebration, and was therefore most helpful and sympathetic from the very beginning. So all eyes turned to the new President and his generous heart was already deeply enmeshed with the best interests of the Academy and of course he could not refuse the importunities of his fellows, "his partners in distress." Accordingly, he assumed the double role of President of the Academy and the Director of the Semi-Centennial. And with what rare skill and wise counsel he carried on to a grand finale, every one knows. "Well done, good and faithful servant!"

Another major problem pressing for solution was that of building a program in keeping with the high aims of the promoters of the celebration, really the *sine qua non* of the whole affair. Who could organize such a program and secure the necessary talent? Here again rare wisdom was shown in the selection of the chairman of the Program Committee, in the person of Dr. Clarence H. Kennedy, of Ohio State University. Such a task is difficult enough under the most favorable circumstances but when beset with severe financial limitations it becomes even more difficult. Dr. Kennedy's task was made somewhat more difficult by an early decision to the effect that only talent from outside the state would be used on the program. Fortunately, however, this restriction was later removed and several of our distinguished Ohio scientists were on the program. The masterly manner in which Dr. Kennedy and his committee handled the building of a notable program is abundantly attested by reference to the printed, official anniversary program and to the array of fine papers published in the May issue of the Ohio Journal of Science. Congratulations, Dr. Kennedy!

Another faithful worker whose arduous labors must not be overlooked was the chairman of the Finance Committee, Dr. H. H. M. Bowman, of the University of Toledo. The solicitation of funds with which to finance a celebration of this kind does not, as a rule, lend itself to the spectacular; only hard work and monotonous drudgery are involved, with disappointments a-plenty. Dr. Bowman and his committee are worthy of the highest commendation for a job well done.

One of the greatest surprises, certainly one of the most impressive features, of the semi-centennial was the number and variety of exhibits, both centralized and fixed, provided for the inspection of visitors. All credit and praise for this part of the semi-centennial belong to Chairman Glenn W. Blaydes and his loyal, efficient committee.

Verily "the first shall be last and the last first!" Who of all those having any part, however minor it may have seemed, in the success of the semi-centennial has not, at one time or another, found himself or herself knocking at the door of our patient, hard-working, indefatigable, resourceful librarian, Mrs. Ethel M. Miller! No matter what one wanted to know about this or that meeting, this or that person, this or that thing, it was always, "See Mrs. Miller!" She never failed us. Hats off to Mrs. Miller!

Part Two. Statistical

Exhibit 1. Charter Members

C. E. Albright.....Columbus
A. M. Bleile.....Columbus
*L. M. Bloomfield.....†Columbus
‡R. F. D. No. 2, Lancaster, Ohio
E. E. Bogue.....Orwell
R. D. Bohannan.....Columbus
*J. N. Bradford.....†Columbus
‡55 E. Oakland Ave., Columbus
H. E. Chapin.....Athens
E. N. Claassen.....Cleveland
E. W. Claypole.....Akron
A. D. Cole.....Granville
F. J. Combs.....Columbus
*Edwin G. Conklin.....†Delaware
‡Princeton University, Princeton, N. J.
George W. Dean.....Kent
H. J. Detmers.....Columbus
Freda Detmers.....Columbus
F. J. Falkenbach.....Wooster
A. Feiel.....Columbus
Kent O. Foltz.....Akron
Sara F. Goodrich.....Geneva
W. J. Green.....Wooster
*G. P. Grimsley.....†Columbus
‡Baltimore, Md.
L. W. Gunckel.....Dayton
Seth Hayes.....Cincinnati
J. S. Hine.....Columbus
L. A. Hine.....Sandusky
T. F. Hunt.....Columbus
Davis L. James.....Cincinnati
Reynold Janney.....Chillicothe
H. L. Jones.....Granville
W. A. Kellerman.....Columbus
Mrs. W. A. Kellerman.....Columbus
D. S. Kellicott.....Columbus
William Krebs.....Cleveland
William R. Lazenby.....Columbus
J. U. Lloyd.....Cincinnati
N. W. Lord.....Columbus
L. H. McFadden.....Westerville
*C. B. Morrey.....†Columbus
‡South Miami, Fla.
*E. L. Moseley.....†Sandusky
‡Bowling Green, Ohio
E. T. Nelson.....Delaware
Edward Orton.....Columbus
A. N. Ozias.....Columbus
A. D. Selby.....Columbus
C. E. Slocum.....Defiance
Ellen E. Smith.....Painesville
H. P. Smith.....Portsmouth
Henry Snyder.....Oxford
William Soule.....Alliance
*H. A. Surface.....†Columbus
Selinsgrove, Pa.
B. F. Thomas.....Columbus
*A. L. Treadwell.....†Oxford
‡Vassar College, Poughkeepsie, N. Y.
*George R. Twiss.....†Columbus
‡Ft. Myers, Fla.
Lewis Ullrich.....Tiffin
H. A. Weber.....Columbus
F. M. Webster.....Wooster
William C. Werner.....Columbus
Jane F. Winn.....Chillicothe
A. A. Wright.....Oberlin
J. B. Wright.....Wilmington

*Living. †Address in 1891. ‡Present address.
Note: Mr. Surface died July 8, 1941.—W. H. A.

Exhibit 2. Approximate Membership at End of Each Year

(Figures in parentheses indicate number new members elected during the year.)

1891 59*	1907 203 (20)	1923 324 (25)
1892 117	1908 209 (25)	1924 372 (59)
1893 136	1909 197 (16)	1925 396 (46)
1894 130	1910 183 (8)	1926 442 (69)
1895 158	1911 197 (13)	1927 484 (69)
1896 158	1912 218 (32)	1928 † (53)
1897 162	1913 232 (48)	1929 589 (66)
1898 164	1914 234 (24)	1930 607 (94)
1899 180	1915 254 (41)	1931 612 (70)
1900 173	1916 268 (17)	1932 467 (58)
1901 165	1917 258 (11)	1933 (28)
1902 158	1918 245 (11)	1934 537 (28)
1903 166	1919 284 (40)	1935 472 (22)
1904 161 (15)	1920 299 (30)	1936 385 (41)
1905 182 (28)	1921 325 (47)	1937 399 (39)
1906 195 (26)	1922 326 (46)	1938 500 (61)
1939 560 (68)	1940 575 (127)	

*Charter members. See Exhibit 1.
†List not published but given as "a few over 500."

Exhibit 3. Life Members

Emerson E. McMillin 1892–1922; died December 31, 1922.
Frank R. Van Horn 1921–1933; died August 1, 1933.
Clinton R. Stauffer 1930–
S. Prentiss Baldwin 1930–1938; died December 31, 1938.
S. Charles Kendeigh 1930–

Exhibit 4. Patrons

C. E. Slocum 1908–1915; died June 7, 1915.
Emerson E. McMillin 1920–1922; died December 31, 1922.
George T. Spahr 1929–1939; died September 12, 1939.

Exhibit 5. Honorary Members

Thomas Corwin Mendenhall 1912–1924; died March 22, 1924.
F. A. McClure 1937–

Note: Approximately 400 members have been made fellows of the Academy.

Exhibit 6. Time of Annual Meetings

Nos. 1 to 10 (1891–1900), held late in December (Christmas Holidays).
Nos. 11 to 25 (1901–1915), held late in November (Thanksgiving Time).
Nos. 26 to 50 (1916–1940), held in the Spring (Easter Vacation Time).

(The meeting time was changed to the Easter Vacation season at the 25th Annual Meeting, 1915.)

Exhibit 7. Places at Which Annual Meetings Have Been Held

(With number of times at each)

Akron	1	Columbus	29	Oxford	2
Athens	1	Delaware	2	Springfield	1
Cincinnati	4	Granville	2	Toledo	1
Cleveland	3	Oberlin	2	Wooster	2

Exhibit 8. Past Officers

(1) PRESIDENTS

*.	A. M. Bleile	1891	
1.	E. W. Claypole	1892	
2.	Edward Orton	1893	
3.	F. M. Webster	1894	
4.	D. S. Kellicott	1895	
5.	A. A. Wright	1896	
6.	W. A. Kellerman	1897	
7.	W. G. Tight	1898	
8.	G. F. Wright	1899	
9.	Josua Lindahl	1900	
10.	A. D. Selby	1901	
11.	William R. Lazenby	1902	
12.	C. J. Herrick	1903	
13.	E. L. Moseley	1904	
14.	Herbert Osborn	1905	
15.	Edward L. Rice	1906	
16.	Charles Dury	1907	
17.	Frank Carney	1908	
18.	John H. Schaffner	1909	
19.	W. F. Mercer	1910	
20.	Lewis G. Westgate	1911	
21.	Bruce Fink	1912	
22.	L. B. Walton	1913	
23.	Thomas C. Mendenhall	1914	
24.	J. Warren Smith	1915	
25.	George D. Hubbard	1916	
26.	Frederick O. Grover	1917	
27.	F. L. Landacre	1918	
28.	Maynard M. Metcalf	1919	
29.	F. C. Blake	1920	
30.	William H. Alexander	1921	
31.	Raymond C. Osburn	1922	
32.	Albert P. Weiss	1923	
33.	Kirtley F. Mather	1924	
34.	E. N. Transeau	1925	
35.	Paul M. Rea	1926	
36.	William McPherson	1927	
37.	Harris M. Benedict	1928	
38.	James S. Hine	1929	
39.	Frederick C. Waite	1930	
40.	August F. Foerste	1931	
41.	Alpheus W. Smith	1932	
42.	Robert A. Budington	1933	
43.	E. Lucy Braun	1934	
44.	James P. Porter	1935	
45.	Walter H. Bucher	1936	
46.	Charles A. Doan	1937	
47.	Charles G. Shatzer	1938	
48.	Claude E. O'Neal	1939	
49.	William Lloyd Evans	1940	

*Chairman of the organization meeting only.

(2) SECRETARIES

1.	William R. Lazenby	1892	
2.	W. G. Tight	1893–1894	
3.	E. L. Moseley	1895–1903	
4.	F. L. Landacre	1904	
5.	L. B. Walton	1905–1912	
6.	Edward L. Rice	1913–1922	
7.	William H. Alexander	1923–1940	

(3) TREASURERS

1.	A. D. Selby	1892–1895	
2.	D. S. Kellicott	1896–1898	
3.	Herbert Osborn	1899–1904	
4.	James S. Hine	1905–1918	
5.	Wencel J. Kostir	1919	
6.	A. E. Waller	1920–1936	
7.	Eugene Van Cleef	1937–1939	
8.	E. S. Thomas	1940–	

Exhibit 9. Special Papers

1. Sandusky Flora. pp. 167. E. L. Moseley.
2. The Odonata of Ohio. pp. 116. David S. Kellicott.
3. The Preglacial Drainage of Ohio. pp. 75. W. G. Tight, J. A. Bownocker, J. H. Todd and Gerard Fowke.
4. *The Fishes of Ohio. pp. 105. Raymond C. Osburn.
5. Tabanidae of Ohio. pp. 63. James S. Hine.
6. *The Birds of Ohio. pp. 241. Lynds Jones.
7. Ecological Study of Big Spring Prairie. pp. 96. Thomas A. Bonser.
8. The Coccidae of Ohio. I. pp. 66. James G. Sanders.
9. Batrachians and Reptiles of Ohio. pp. 54. Max Morse.
10. Ecological Study of Brush Lake. pp. 20. J. H. Schaffner, Otto E. Jennings, Fred J. Tyler.
11. The Willows of Ohio. pp. 60. Robert F. Griggs.
12. Land and Fresh-water Mollusca of Ohio. pp. 35. V. Sterki.
13. The Protozoa of Sandusky Bay and Vicinity. pp. 52. F. L. Landacre.
14. Discomycetes in the Vicinity of Oxford. pp. 54. Freda M. Bachman.
15. *Trees of Ohio and Surrounding Territory. pp. 122. John H. Schaffner.
16. The Pteridophytes of Ohio. pp. 41. John H. Schaffner.
17. Fauna of the Maxville Limestone. pp. 65. W. C. Morse.
18. The Agaricaceae of Ohio. pp. 116. W. G. Stover.
19. An Ecological Study of Buckeye Lake. pp. 138. Frederica Detmers.
20. Flora of the Oak Openings West of Toledo. pp. 56. E. L. Moseley.
21. The Cedar Cliffs Prairie Opening of the Cincinnati Region. pp. 36. N. Mildred Irwin.

*Out of print.

Exhibit 10. Sales of Publications

Receipts

1903–1904—Treasurer's report shows sales amounting to	$ 5.09
1904–1914—W. C. Mills, librarian in charge, sales of	311.69
1915–1923—C. W. Reeder in charge, sales amounted to	252.42
1924–1925—Miss Alice McKee in charge, sales reached	65.89
1926–1940—Mrs. Ethel M. Miller in charge, sales reached	701.54
Adding to these receipts bank dividends on funds on deposit, 1926–1937, the sum of	37.00
We have total receipts of	$1,373.63

Expenses

1899—Cost of Special Papers Nos. 1 and 2 (Exhibit 9)	$160.00
1904–1914—Postage paid by W. C. Mills, librarian	316.78
1929—Cost of Special Paper No. 21	210.00
Total expenditures	$686.78
1903–1940—Leaving a cash balance of	$686.85

N. B.: The postage on Academy publications since 1915 has been paid by the Ohio State University Library thus saving to the Academy the entire sum of the balance noted above.

Exhibit 11. Exchanges

1905. W. C. Mills, librarian, in charge of Academy exchanges; at this time exchanges were being received from 26 scientific societies and colleges.

1909. Academy publications were being sent to 16 scientific societies and to two foreign museums, Buenos Aires and the British.

1915. The Ohio Academy of Science library was deposited in the Ohio State University Library and C. W. Reeder placed in charge of the exchanges. Mr. Reeder immediately inaugurated an intensive effort to secure additional exchanges, the net result of his effort being some 200 new titles.

1921. Another effort to secure more exchanges was made but with less satisfactory results.

1924–25. Miss Alice McKee was in charge of the exchanges.

1926. Following the departure of Mr. Reeder from the library, Mrs. Ethel M. Miller was placed in charge of the Academy exchanges and through her wise, persistent efforts 34 new exchanges were added the first year and the list has continued to grow ever since.

1941. As a result of the faithful efforts of the afore-mentioned persons the Ohio Academy of Science now has on its exchange list 153 domestic and 282 foreign exchanges, or a total of 435. The number of publications received is approximately 800, as many institutions send several titles.

Exhibit 12. Chairmen Semi-Centennial Committees

Group A

1. *On Publicity:* Edward S. Thomas, Ohio State Museum.
2. *On Program:* Dr. Clarence H. Kennedy, Ohio State University.
3. *On Speakers:* Frank J. Wright, Denison University.
4. *On Invitations:* Dr. Raymond C. Osburn, Ohio State University.
5. *On Historical Statistics and Lists:* Dr. Samuel Renshaw, Ohio State University.

Group B

1. *On Exhibits:* Dr. Glenn W. Blaydes, Ohio State University.
2. *On Memorials:*
3. *On Banquet:* Dr. F. C. Dockeray, Ohio State University.
4. *On Finances:* Dr. H. H. M. Bowman, University of Toledo.
5. *On Publications:* Dr. Henry C. Shetrone, Ohio State Museum.
6. *On Housing:* Dr. Fred A. Hitchcock, Ohio State University.

Exhibit 13. Formation of Sections

1891–1907. No separate sections.
1908. Biology, Geology.
1909. Biology was divided into Botany and Zoology.
1912. Physics.
1917. Anatomy, Physiology, later known as the Medical Sciences.
1919. Psychology.
1924. Name of the Physics Section changed to the Physical Sciences.
1932. Geography.
1933. Chemistry.
Section of Physical Sciences changed to "Physics and Astronomy."
1938. Mathematics.
1940. Junior Academy of Science.

Exhibit 14. Grants from the Research Fund

1899.	W. G. Tight, J. A. Bownocker, J. H. Todd, R. C. Osburn	$160.00
1900.	Gerard Fowke, R. C. Osburn, T. A. Bonser, J. S. Hine, E. B. Williamson	164.45
1902.	J. S. Hine, Lynds Jones, F. L. Landacre, Max Morse, J. H. Schaffner.	375.50
1903.	T. A. Bonser	50.00
1904.	F. L. Landacre, Max Morse, J. G. Sanders, J. H. Schaffner	100.00
1905.	R. F. Griggs, Herbert Osborn	67.92
1906.	W. B. Herms, J. E. Hyde, F. Carney, Chas. Brookover, Victor Sterki	173.65
1907.	W. C. Morse	50.00
1908.	A. Dachnowski, H. S. Hammond, S. Morgulis, L. B. Walton, Freda Bachman (project published)	99.09
1909.	J. H. Schaffner, L. B. Walton, Freda Detmers, A. Dachnowski, G. E. Coghill, R. J. Sim	179.73
1910.	J. H. Schaffner (for publication), A. Dachnowski, Freda Detmers, J. C. Hambleton	174.70
1911.	W. C. Morse, W. M. Barrows, A. Dachnowski	118.50
1912.	W. G. Stover, Freda Detmers, L. B. Walton, J. S. Hine, A. Dachnowski, W. J. Kostir	130.65
1913.	Clara Mark, A. Dachnowski, Chas. Brookover, Freda Detmers, S. R. Williams	196.80
1914.	J. S. Hine, F. B. H. Brown, O. W. Pflueger, R. F. Griggs, S. R. Williams, W. H. Shideler, L. B. Walton	295.40
1915.	F. C. Blake, Charles Sheard, L. B. Walton, W. H. Bucher, J. S. Hine, S. R. Williams	355.28
1916.	S. R. Williams and W. H. Shideler; L. S. Hopkins, B. W. Wells, F. L. Landacre	200.00
1917.	Forest B. H. Brown, B. W. Wells, W. L. DuBois, S. R. Williams, W. M. Barrows	169.04
1918.	G. D. Hubbard, E. L. Rice, L. B. Walton, E. N. Transeau, H. W. Lutz	215.12
1919.	J. S. Hine, W. H. Bucher	150.00
1920.	F. C. Blake, Paul B. Sears, W. H. Bucher, L. B. Walton, Elsie Jordan	323.21
1921.	Elsie Jordan, L. B. Walton	42.81
1922.	Paul B. Sears, J. S. Hine	56.20
1923.	L. B. Walton, F. H. Herrick, L. H. Tiffany, J. E. Kindred, E. L. Stover, R. A. Dobbins	300.76
1926.	W. M. Barrows	70.00
1928.	Bernard S. Meyer	50.00
1931.	Bernard S. Meyer, Paul B. Sears	73.55
1934.	W. L. Evans	100.00
1935.	R. B. Frost	100.00
1936.	J. P. Porter	75.00
1937.	D. C. Rife, Wayne M. Felts, R. A. Dobbins	275.00
1938.	G. D. Hubbard, Frank H. Verhoek	150.00
1939.	E. Lucy Braun, B. G. Anderson, C. A. Lawson	300.00
1940.	J. W. Frink, A. N. Solberg	150.00

LIVING CHARTER MEMBERS OF THE OHIO ACADEMY OF SCIENCE
1940

LLOYD MORRIS BLOOMFIELD

AARON LOUIS TREADWELL
Vice-President 1896

GEORGE RANSOM TWISS

GEORGE PERRY GRIMSLEY
Greystone Studios, Inc.

CHARLES BRADFIELD MORREY

EDWIN LINCOLN MOSELEY
Secretary 1895–1903
President 1904

HARVEY ADAM SURFACE
Died July 8, 1941

JOSEPH NELSON BRADFORD

EDWIN GRANT CONKLIN

CHARTER MEMBERS WHO BECAME PRESIDENTS OF THE OHIO ACADEMY OF SCIENCE

DAVID SIMONS KELLICOTT, 1895
Vice-President 1893
Treasurer 1896–1898

FRANCIS MARION WEBSTER, 1894

EDWARD ORTON, 1893

ALBERT A. WRIGHT, 1896
Vice-President 1892

WILLIAM ASHBROOK KELLERMAN, 1897

AUGUSTINE DAWSON SELBY, 1901
Vice-President 1899
Treasurer 1892–1895

EDWARD W. CLAYPOLE, 1892

WILLIAM RANE LAZENBY, 1902
Secretary 1892

JAMES STEWART HINE, 1929
Treasurer 1905–1919

CHARTER MEMBERS WHO BECAME VICE-PRESIDENTS OF THE OHIO ACADEMY OF SCIENCE

CHARLES ELIHU SLOCUM, 1897

CHARLES EDWIN ALBRIGHT, 1899

DAVIS LAWLER JAMES, 1893

MRS. WILLIAM A. KELLERMAN, 1894, 1901

ALFRED DODGE COLE, 1914

MISS JANE F. WINN, 1895

HENRY EDGERTON CHAPIN, 1895

J. B. WRIGHT, 1897

LOUIS H. MCFADDEN, 1904

Cornwell, Dayton, O.

CHARTER MEMBERS OF THE OHIO ACADEMY OF SCIENCE

WILLIAM KREBS

LEWIS ULLRICH

HERBERT LYON JONES

FRANK JOSEPH FALKENBACH

MISS FREDA DETMERS
Vice-President 1918

ALBERT MARTIN BLEILE
Chairman, Organization Meeting, December 31, 1891

ROSSER DANIEL BOHANNAN

WILLIAM JAMES GREEN

NATHANIEL WRIGHT LORD

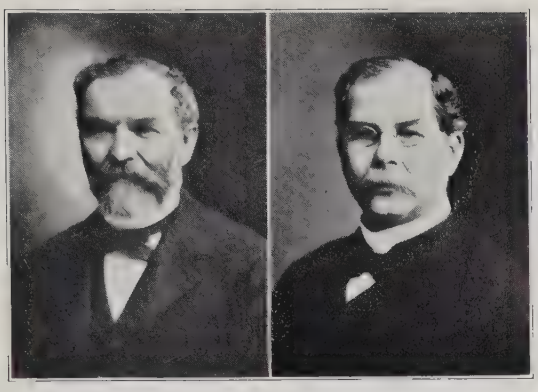
CHARTER MEMBERS OF THE OHIO ACADEMY OF SCIENCE

E. T. NELSON	KENT OSCANYAN FOLTZ	WILLIAM SOULE
HORACE P. SMITH	MISS SARA F. GOODRICH	BENJAMIN FRANKLIN THOMAS
GEORGE W. DEAN	EDO N. CLAASSEN	HENRY J. DETMERS

CHARTER MEMBERS OF THE OHIO ACADEMY OF SCIENCE

L. A. HINE	HENRY SNYDER	WILLIAM C. WERNER
ERNEST EVERETT BOGUE	JOHN URI LLOYD	ALBERT NEWTON OZIAS
REYNOLD JANNEY	SETH HAYES	THOMAS FORSYTH HUNT

PLATE VII



CHARTER MEMBERS OF THE OHIO ACADEMY OF SCIENCE

ADOLPH FEIEL HENRY ADAM WEBER

Pictures were not secured of Frank J. Combs, L. W. Gunckel, and Miss Ellen E. Smith, Vice-President 1892

PLATE VIII

SEMI-CENTENNIAL OFFICERS OF THE OHIO ACADEMY OF SCIENCE
1940

WILLIAM HENRY ALEXANDER
Secretary

WILLIAM LLOYD EVANS
President

EUGENE VAN CLEEF
Treasurer

Presidential Address

(Fifty-first Annual Meeting)

THE SAGA OF THE PADDY'S RUN

STEPHEN R. WILLIAMS

INTRODUCTION

Thinking over the varied interests of our Academy audience, and the infinitesimal area in the field of zoology in which I might claim original knowledge, it seemed evident that were I to speak along that line tonight it would bore even the other zoologists.

There is however a matter of history which should interest you all as members of the Commonwealth of Ohio, which I have had especial opportunities to study from original sources. They say every man who is born has one speech in his make-up, and I hope for your sakes that this is mine.

You realize that we all have a good knowledge of the things of the present, and a fraction of what went on forty years ago which our parents knew. By the time we get to our grandparents, our fraction of their unwritten knowledge is a small one, and when it comes to great-grandparents, unless it has been written down where it may be read, one is exceptional if he knows the names of those eight persons, and can make a fifty per cent grade in answering the questions as to where they were born or married, or of what they died.

The modifications which produced the stage on which this history was enacted, the Paddy's Run Valley, have been taken from the Bulletin on the Geology of Cincinnati by Professor N. M. Fenneman.

THE PADDY'S RUN VALLEY

Preparation of the valley for the first settlers dates back to the time of the receding Wisconsin glaciation, perhaps 20,000 years ago. In the interglacial period between the Illinoian and Wisconsin ice sheets the Whitewater river, now a tributary of the Miami, emptied into the ancestral Ohio near the city of Harrison in Hamilton County. The old Ohio made an enormous north bend in the present city of Cincinnati,

flowing northward through the present Mill Creek Valley to Symmes Corner in Butler County where the larger Miami entered it and the combined ancestral river bore off southwest toward New Haven and Harrison and beyond.

As the Wisconsin ice spread over the northwest two-thirds of Ohio the water melting from it formed a succession of long pools marking the bed of the present Ohio river. The lower end of one of these pools was at Anderson's ferry just west of Cincinnati. Following the course of two small streams, one flowing eastward toward Cincinnati and the other on the opposite side of the divide flowing toward the ancestral river south of Harrison, the accumulation of water cut through the hills and thereby eliminated the enormous Mill Creek, Symmes Corner, Harrison northward bend, giving us the present course of the Ohio river from Cincinnati to Lawrenceburg.

As the ice mass withdrew very slowly over the Symmes Corner-Harrison section of the ancestral river, by utilizing the valleys of certain small streams to the east and south of the ice front, the flood water cut a path from below Venice, by New Baltimore and Miamitown to the region of Cleves. This has been used by the Great Miami, whose waters follow first the old ancestral valley from Symmes Corner, then this narrower new valley to Cleves, and then are joined by the Whitewater from the north to reach the straightened Ohio below Elizabethtown.

This same lingering of the ice mass caused the stream now known as the Dry Fork of the Whitewater, which had entered the ancestral Ohio independently at Fernald, to skirt the ice and cut southward through a ridge, thereby reaching the ancestral Ohio bed much farther west and now emptying into the Whitewater River below Harrison. This new lower end of this stream runs over the thick deposit of gravel in the ancestral valley and as a consequence, except at flood times, the visible water is so much reduced that the early settlers called it the Dry Fork (of the Whitewater). The narrow, deep, steep incline of the cut through the ridge just mentioned was well adapted for an inexpensive mill dam and a short mill race, and here the first grist mill for the new settlers was located. The unused lower part of the old Dry Fork, together with the shorter branches from the east and north now forms a smaller separate stream entering the Miami below Fernald near where the newer narrow post glacial part of the Miami Valley begins. This is the Paddy's Run.

I cannot do better than to quote from Murat Halstead's picture of the Paddy's Run valley.

"The bosom of the valley was laced with a thread of silver; a stream—the home of sunfish—murmured and sparkled under lofty sycamores, statuesque, their arms white as marble, and lowly willows that drooped along the shining water like slender rods of gold. . . . The springs at the foot of the hills could be traced like veins in a leaf as little brooks to the larger stream in the center, that brightening with their increase, babbled over the polished gravel and glistening sand southward to the Great Miami and the greater and splendid Ohio."

No one knows whether the luckless Irishman, possibly one of Wayne's scouts—whether he actually was drowned or merely engulfed in the semi-liquid mud as he crossed the run following the west bank of the Miami north toward Hamilton. But the stream was named in his honor and later the postoffice of the same name in the village farther upstream was so distinctive that letters from Wales addressed to Paddy's Run, America, arrived safely.

THE INDIANS

In traditional times no Miami Indians lived the year round in this valley. They knew Kentucky as The Dark and Bloody Ground, and planned to spend their winters at least two days march north of the Ohio so as to avoid surprise attacks.

The narrow beaten paths through the woods along the tops of the hills possibly date back to the postglacial mammoths and mastodons whose bones two centuries ago gave the name to Big Bone Lick on the Kentucky side of the river below Lawrenceburg. These paths were certainly used by the buffalo (bison) as they made their way from one prairie opening or windfall to another. The explanation for the single file habitual to Indian warparties is that they followed these paths on their march.

Old Chief Kiatta and his daughter Okeana left their names—the one for a small tributary of Dry Fork, Kiatta Creek, and the other for the present village of Okeana in the center of Morgan Township, both near their summer residence on Camp Run.

Indians were not uncommon sights to the white settlers until the wholesale deportations beyond the Mississippi which occurred in the 1820's. Many of you have driven through

Miami, Oklahoma, a name which is a monument to the forced migration of one particular tribe.

THE WELSH IMMIGRATION

A majority of the early white settlers were Welsh. In 1795 a party of emigrants started from Llanbrynmair, Montgomeryshire, North Wales. Among them were George Roberts and wife, David and Mary Francis, Rev. Rees Lloyd, wife and children, and two young unmarried men, Edward Bebb and Ezekiel Hughes. Their plan was to be transferred by sail boat from the nearest point on Cardigan Bay to Bristol and there embark on the ship *Maria* for Philadelphia. For fear of the press-gang it was decided that the women only should sail with the luggage while the men, for safety's sake to avoid impressment as sailors, would walk the fifty or sixty miles to Bristol. Something delayed the expected freight boat a number of days. The alarmed women walked twenty miles toward Bristol and met the men coming back to find out what was the matter. The boat with the baggage must have come along and picked up the whole party because they reached the *Maria* at the last moment, after they had been given up, and the ship was about to start without them.

Landing at Philadelphia the party scattered. George Roberts and Rees Lloyd settled at Ebensburg, Cambria County, about the middle of Pennsylvania, the Francis's stopping near Philadelphia, while Bebb and Hughes, having no families, continued westward to Cincinnati, arriving in 1796. The Symmes Purchase land had been picked over and the land west of the Great Miami, not yet surveyed, was not on the market. There was nothing to do but wait. So they squatted on Blue Rock Creek in Colerain township, which, though in the Symmes Purchase, was so rough and broken as not to be in demand. Others of the Welsh families stopped in Blue Rock later for the same reason, and the first white child born in Colerain township was to one of these families.

When at last in 1801 the surveyed lands were available, Bebb bought half a section on the Dry Fork of the Whitewater in Butler County, while Ezekiel Hughes, being more of a plutocrat, bought two sections further south in Hamilton County. Since neither of these men was married, as soon as the farms were arranged for, they started on the long journey back to Wales for helpmeets.

Hughes, back home in Wales, married a Margaret Bebb, who may have been a sister of his friend Edward Bebb. To tell the Bebb story I shall have to leave Bebb and Hughes trudging along the roads eastward, and start back in Wales myself.

No letter, as far as we know, had come back from America during the years from 1795 to 1801 while the squatters were waiting for their land, and it may have been thought that the young fellows were dead. As a result Margaret Roberts, sister of George Roberts of the 1795 party, who had known Edward Bebbs, when they were children, had been urged by her family into marrying a Rev. Mr. Owens. Her older sister Grace, her husband and two children were planning to emigrate to America and Rev. Owens and his bride decided to accompany them. They started in 1801; the passage was long and tempestuous. Both husbands and Grace's two children died, reportedly from bad water, and were buried at sea. Another version of the story is that the captain and mate of the vessel, taking note of the two beautiful young women, took pains to poison the water for the unwanted relatives. At any rate for some reason, the two widowed sisters are said to have left the ship secretly at the Philadelphia dock, by sliding down a rope at the bow while the officers were superintending the regular debarkation. They made their way to their brother, George Roberts at Ebensburg, sending a messenger back to the ship to claim their abandoned belongings.

Believe it or not, two days after Margaret Roberts Owens reached Ebensburg, her childhood's acquaintance, Edward Bebb, walked in from his farm on Dry Fork. It did not take him long to decide not to go any farther towards Wales. They were married February 2, 1802, probably walked to Pittsburg, certainly floated from there to Cincinnati on a flatboat or broad-horn and reached the Dry Fork in time for Edward to do some spring planting. (The two-story log house in which the Bebbs set up housekeeping is still in use.) On December 8th, 1802, William Bebb, one of the subjects of this paper, was born.

FORMING THE COMMUNITY

For more than twenty years a stream of Welsh came to the Paddy's Run, and from it as the country opened, other Welsh settlements were made, notably in the regions of the head-

waters of the Miami, Maumee, and Wabash from which the Indians had been sent west.

With neighbors helping, a comfortable log cabin could be built in two days and the amount of food obtainable was limited only by the rate of clearing the land.

Others appreciated the fertile soil of the Paddy's Run valley besides the numerous Welsh whom I have not attempted to name. Appleton, Blackburn, Carmack, Drybread, Halstead, Harding, Howard, Milholland, Parkinson, Phillis, and Shaw are names of families from the older states who settled in and about the valley.

James Shields, Glasgow graduate, was for many years the representative for Butler County in Columbus, and at least once was the district Representative in the capital at Washington.

CHURCH

After the settling, the first endeavor as a community was to start a church society. This was in 1803, the year Ohio became a state. The incoming Welsh were usually Non-conformists or dissenters from the English Established Church. Those from the Eastern States probably represented many different forms of worship. The story goes that the committee of five, who drafted a church constitution, were of five different church persuasions and that they chose the Congregational type because it was self-governing and because it was a church not represented by any committee-man.

Services were held at the cabins of different members, in a private school house, in a wagon-maker's shop, and in favorable seasons in a central grove of sugar maples. By 1825 a brick meeting house, now the community house, was erected in this grove.

SCHOOL

The first school was established in 1807, long before Ohio's public schools. The teacher boarded around in the homes from which the children came, and received in addition an honorarium of $0.75 per week.

In 1809 a subscription school charging $1.50 per child for a term of three months was started. They were taught reading, writing, and arithmetic, graduating at the Rule of Three.

In 1819 David Lloyd, graduate of the University of Pennsylvania, introduced grammar and geography, and separated

his students into groups or classes. A letter from William Bebb to his sister, Mrs. Vaughn, speaks of the high quality of his teaching. He must have had a screw loose somewhere, however, as he is said to have spent most of his life trying to devise a perpetual motion machine.

In 1821 Rev. Thomas Thomas established a high school and boarding school in which he taught to advanced pupils grammar, geography, arithmetic, algebra, and geometry.

LIBRARY

In 1821 a bill was passed in the Ohio Legislature incorporating the Union Library Association of Morgan and Crosby Townships. Shares cost $3.00 and sixty-five were sold. The books were kept at the mill at the Dry Fork Cut previously mentioned because every family had to bring its wheat and corn there to be ground.

When the turnpike road was put through from Cincinnati to Brookville, Indiana, in 1838, this library was no longer located at a common meeting place, and was neglected.

About twenty years later a second subscription for a library followed renewed interest in the community, and at present the library is actively functioning.

WILLIAM BEBB (AND HIS SCHOOL)

William Bebb, oldest child of Edward Bebb and Margaret, his wife, was born in a frontier settlement in a frontier state, from foreign born parents who were seeking a livelihood and independence not possible in their native land. There were three Bebb children.

All the opportunities locally possible were given them. Very probably the first book teaching was done by the mother, but you may be sure that after the age of six or eight William Bebb had at least three or four months of schooling every year. We have his own appreciative evidence as the skill and information of David Lloyd and his very unfavorable comments on an earlier teacher. All the Bebb line have exceptional memories, ability to learn by observation, and then apply that knowledge with good judgment.

Naturally he and his brother worked on the home farm and neither ever lost his interest in things agricultural. During school sessions they would have regular chores, night and morning, for which they were held responsible.

We can infer that he was a fine student. He was examined for his certificate by James Shields, the Glasgow graduate, and began teaching the Paddy's Run district in 1826. His next school was at North Bend, the home of General W. H. Harrison. By 1828 he was married. Possibly influenced by the Thomas boarding school started in Paddy's Run some years before, the young couple started a boarding school on the Bebb farm for boys from 10 to 14 years old. It was a success from the start. There is nothing except the story of Robert Owen's New Harmony project going on about this same time in Indiana that is as spectacular as the few bits of information I have been able to gather about this Sycamore Grove school on Dry Fork.

If I knew all the high points of ultra-modern education I think I could show that Bebb had foreshadowed many if not most of them in his methods—(1) the development of interest and (2) of groups of related interests, (3) the project method with its plan, assembly, and completion, are perfectly evident. The freedom of the frontier encouraged direct attack on problems rather than following of traditional methods. Moreover, a perfectly strong healthy helpmeet with a genius for cooking and for handling boys was an asset which cannot be disregarded. I have been able to find nothing of such facts as the curriculum or tuition charged per term, but there is a letter describing the Bebb school in the *Enquirer* of September 14, 1879, by Judge A. W. C. Carter, who spent two years in the school, that is much more interesting.

The school house was just across the road west of the Dry Fork and faced east. The central part held the school rooms, the south wing was the boys' dormitory and Mr. Bebb and family lived in the north wing. There were 30–40 boarders from Cincinnati and the South, and a few local day pupils.

The year was divided into two five-month terms, with a month's vacation between each two terms. School hours each day were from 9 to 12 and from 2 to 5. The assembly room was 20 feet by 30 feet with rows of desks for the scholars on three sides and the teacher's desk on the fourth. In spite of the large wood stove in the center of the room and the fireplace in the dining room it was very cold in the winter time. According to Judge Carter there was no way of heating the dormitory and as the whole building was up on piers, chilblains and frosted feet were the usual thing. There were no washing facilities in

the dormitory and any face or hand washing was done at the creek just over the road.

The boys were encouraged to build cabins of their own, and given the privilege of cutting logs from the woods along the stream. The more pretentious of these log cabins were two-room affairs with stone fireplaces and brick chimneys and during the winter were probably more comfortable than the frame dormitory. It was permitted to be out there in the evening but the boys all had to be back in the dormitory at Mr Bebb's inspection hour in the morning. It must have been an ideal life after the homesick period had passed. Skating, swimming, and fishing came in their seasons. The boys learned to cook the sunfish, catfish, chubs, suckers, goddle-eyes (rock bass), soft shelled turtles, snappers, crayfish, and rabbits in their fireplaces.

The orchards of the venerable "Uncle" or "Sir" (Edward) Bebb were free to the boys when the fruit was ripe, just so they did not club the fruit out of the trees. Every two boys, as partners, were assigned a plot of ground by William Bebb to raise what they liked best to eat. Probably there was some private agreement arrived at among the groups as to the diversification of food, and certainly there were few insect parasites to be fed then as compared to the present.

Mr. Bebb was justice of the peace and legal adviser for most of the inhabitants of Morgan township. The civil and criminal court cases were held in the assembly room with the boys (10–14 years old) all required to be present at their desks during the trials. What wonder many of his pupils grew up to become lawyers, judges, and political leaders?

About this time there was a period when military training for men came into fashion. According to Judge Carter, "Mr. Bebb was a militia commander and when in his regimentals, mounted on his black stallion on his way to the parade ground, he was a sight to us boys indeed."

Among the scholars who attended the Sycamore Grove school were Judge A. W. C. Carter, whose article is the source of my information.

William Dennison, Governor of Ohio, 1859–61.

Charles Larrabee, born in Rome, New York, 1820. His father was a major in the army and by appointment of President Jackson, 1828–36, was Surveyor of the Fort of Cincinnati. After the Bebb school closed in 1832 he attended an academy

in Springfield and later Granville College (now Denison University). At twenty-four he went to Chicago to practice law. In 1847 he moved to Wisconsin where he lived for nearly twenty years. He was a member of the second Constitutional Convention of Wisconsin, was a circuit judge for ten years, Representative in Washington, 1858–60, in the Union Army as Captain, Major and Colonel, 1861–63, retired due to ill health. For the sake of his health he moved to the west. He became a member of the first Constitutional Convention of Washington Territory. Later he made his home near San Bernardino, California, practicing law and breeding new plants and fruits. He lost his life in a railroad accident, January 20, 1883.

Hon Dr. G. M. Shaw, of Indiana.

Hon. Daniel Shaw, Sheriff of Grant Parish, member of the Louisiana legislature.

Hon. Peter Melendy, of Iowa.

Hampton Davis, mayor of Vicksburg.

Augustus Jordan, prominent lawyer in New Orleans.

When in 1832 Mr. Bebb gave up Sycamore Grove and moved to Hamilton to take up the practice of law, the whole of Butler and Hamilton Counties and neighboring Indiana regretted the loss of the school.

HAMILTON, 1832–1850

Mr. Bebb was already well known in Hamilton since he had been one of the county teachers' examiners for years, and he developed a good law practice.

He did not lose his interest in teaching. In 1835 he drafted a bill to charter a female academy in Hamilton and became an adviser to the management.

He was interested in all public movements; was an ardent advocate of the educational values of County Fairs to the farmers and spoke for them at other county seats.

At the Buckeye Celebration, September 30, 1835, in honor of the completion of Fort Hamilton by General St. Clair forty-four years previously, Mr. Bebb was the orator of the day. He emphasized the merits of the Ordinance of 1787, and especially commended the exclusion of involuntary servitude from the Northwest Territory. He says, "we meddle not with slavery as it exists in the South. Only one catastrophe can arrest the onward career of the country, and that is a

severance of the Union," so it is clear that both these questions were in the air at the time.

He took an active part in politics as a Whig and campaigned for William Henry Harrison in both 1836 and 1840. The election of Polk in 1844 settled both the admission of Texas in 1845 and the certainty of war with Mexico.

In 1846 he was elected governor of Ohio, the third governor born in Ohio and the first from the southwestern part of the state. The Mexican war was unpopular with the Northern Whigs because of the increase of slave territory. Elected governor by a party unfavorable to the war, and being himself against it, he nevertheless fell into line, believing that the loyal support of the Government was more important than consistency to a party.

The State House in Columbus had been authorized seven years earlier, but for some reason or other nothing had been done. He sent a message to the Legislature dealing chiefly with the construction of the State House, and though it was not completed for six more years, his prodding produced visible results. Ohio was very prosperous during his term of office, showing good money, advances in schools, activity in the construction of railroads and turnpikes, and good business conditions generally.

In his final message, printed in 1849, he said that the majority in the United States was against the extension of slavery into New Mexico and California, and that any compromise passed by Congress against the will of the majority would "cause the lightning to burst forth hereafter with more terrific and astounding effect."

His little daughter Sarah died of acute appendicitis (as we would call it now) in 1848, and was buried in Greenwood Cemetery which had been obtained for Hamilton in great part through his efforts.

Discouraged by the national prospects he decided to retire from the law. He purchased a large tract of land on Rock River in Illinois and in 1850 moved there, using the Miami and Erie canal to Toledo and a lake boat from there around the Soo to Chicago. With his household goods he took the coffin of his daughter from Greenwood, and she was buried in Illinois.

The slavery question was becoming more and more serious and many former Whigs were becoming black Abolitionists.

The Whig party and Henry Clay believed in compromise or appeasement as we speak of it today, and I think Governor Bebb went to his parents' old home in Wales in 1855 and arranged for a new Welsh colony to the United States with some such object as demonstrating the greater efficiency of free over slave labor in mind. In this colony were two of his own first cousins, Samuel and George Roberts. There is no reason why he should have chosen East Tennessee as compared with Illinois, Iowa, or even Wisconsin, for the location of the colony unless he hoped that the example to be set by the hundred industrious free Welsh he was helping over would tend gradually to educate the South away from slavery.

In May, 1857, his son Michael married and came to the Illinois home on the wedding trip. A number of the hoodlums of the neighborhood arranged an evening charivari or "belling," bringing guns and bells and flasks. Mr. Bebb ordered them off to no avail. They were too full of their artificial courage to be frightened off by firing over their heads. He fired again at a lower level and killed one of the roisterers.

He was tried for manslaughter in the Rockford County Court. It was a notable case. Two of his former coadjutors in Ohio courts, Ex-governor Tom Corwin of Lebanon, and Judge W. T. Johnston of Cincinnati, volunteered to assist his Rockford attorneys for old friendship's sake. The trial lasted four days and the jury after deliberating four hours brought in a verdict of Not Guilty. The notes of Governor Corwin's speech were filed with the official papers as wonderful oratory and convincing argument.

Since the Welsh colony in Tennessee needed superintending and legal guidance the family moved south, and Mr. Bebb began the practice of law in Knoxville. His son Edward drove 200 sheep from Rockford, Illinois, to Huntsville, Tennessee, between December 19 and January 10, having been snowed up once in Indiana.

In January, 1860, Mr. Bebb wrote his sister in Paddy's Run: "We have been received with marked attention and friendship by the people of Knoxville. Nine-tenths of them are old Whigs of the Henry Clay school. I apprehended that we might find trouble in the present excited state of public opinion but I have not seen or heard anything unkind toward the people of the North."

However, in a letter from Knoxville six months later, Mr. Bebb, after speaking of the railroad he had hoped to encourage the business men of Cincinnati to start (the present Cincinnati Southern) and telling of half a dozen law cases he had conducted in Knoxville and vicinity, hopes that he can devote the rest of his life to his profession *which he should never have quit* (italics his). He then says to his sister: "The more I see of slavery the less I like it. Not because the slaves are not well treated but because of its general influence upon the whites and upon the industrial and moral trend of society. We have an excellent house, much like our Hamilton house, and a good garden. We have one good colored girl whom we hire at $6.00 per month."

Mr. Bebb made a few speeches in Illinois that summer in favor of Lincoln and word was sent him that he had better not come back to Tennessee. His Welsh colony also was scattered all over the northern United States by the Civil War. After his family left their home it was broken into and looted by Southern sympathizers. His portrait as Governor of Ohio was slashed with a saber. Later some of his possessions were reclaimed and sent to Washington where he was employed as Pension examiner from 1861 to 1869. The damaged portrait is still in Washington, the property of one of his grandsons.

At home in Rockford he took pneumonia due to exposure undergone when returning from making a speech in favor of Grant as President. It was his first serious illness in his whole life and he never fully recovered. He died in Rockford October 23, 1873.

His son, Michael Schuck Bebb, was a well known amateur botanist and correspondent of Asa Gray of Harvard. His brother, Evan Bebb, became a business man in New York City. The firm of Bebb and Graham preceded the pioneer department store, A. T. Stewart and Company.

OTHER NATIONALLY KNOWN MEN

The Paddy's Run community did not stop when it produced a native born governor of Ohio.

Governor James Brown Ray of Indiana, born in Jefferson County, Kentucky, 1794, attended school in Paddy's Run, probably living across the line in Franklin County, Indiana. He studied law in Cincinnati, was the last non-partisan governor ever elected anywhere in the United States as far as I know.

He advocated railroads running like spokes of a wheel out from Indianapolis. He served from 1825 to 1831. He died of cholera in Cincinnati in 1848.

There have been a number of noted ministers. Rev. Benjamin W. Chidlaw, born in Wales, graduate of the class of 1833 of Miami University, began his preaching at Paddy's Run, and then spent fifty years in the service of the Sunday School Union.

Dr. Thomas Ebenezer Thomas graduated at Miami in 1834. He was a member of the first anti-slavery group in Butler County, and became a well known Abolitionist. He was for some years president of Hanover College in Indiana, and then professor in The New Albany Theological Seminary. This school was moved to Chicago as McCormick Seminary and Dr. Thomas was dropped with others because of their radical views on the subject of slavery. He was a Moderator of a Presbyterian General Assembly and died in harness while teaching in the Lane Theological Seminary, in Cincinnati.

Dr. Mark Williams, Miami '58, was a missionary to North China for fifty-four years, having been sent out when the route to China was by sailing vessel eastward around the Cape of Good Hope rather than westward across the Pacific by steamer.

Among writers Paddy's Run has made notable contribution in the persons of Murat Halstead and Albert Shaw.

Murat Halstead, from whom I quoted the description of the valley, was a student at Farmer's College, a war correspondent, the editor of the Cincinnati Commercial for many years, and of the Brooklyn Graphic.

Albert Shaw, still living at the age of 84, graduated from Grinnell College, Iowa, was the editor of the Minneapolis Tribune from 1883–1888, and 1889–90, was appointed professor of government and international law in Cornell University, 1890, and established the American Review of Reviews in 1891. He is the author of many economic and contemporary history studies.

I will end with the mention of two brothers, descendants of David and Mary Francis, of the group of passengers on the *Maria* in 1795, who are also grandnephews of Governor Bebb.

Mark Francis, O. S. U. '87, was professor of veterinary medicine in the Texas A. and M. College. He devised a

method of immunizing cattle against the tick fever, and so made possible the development of the great cattle industry of the Southwest.

President Thompson, speaking about 1915, said of him, the first graduate of the Ohio State veterinary school, that if the Ohio State University during the forty odd years of its existence had done nothing but give Mark Francis to the world, it would have earned all it had cost the state of Ohio up to that time.

Edward Francis, O. S. U. 1894, Public Health Surgeon, is retired, but still at work in the Hygienic laboratory in Washington.

He is known among his colleagues as the human test tube, because he has suffered from so many of the diseases he has worked with. He is best known for his very complete studies of Tularemia or Rabbit Fever, numerous publications from 1919 on. The Rocky Mountain Spotted Fever, the Undulant Fever, the Tick or Relapsing Fever are other diseases his work has helped to understand.

I am sad to have to report that due to centralization of the public schools and mail coming from Hamilton by rural free delivery, there may be nothing left of the village on the Paddy's Run, which has produced more than 250 college graduates, but the crossroads. However the stock, whether Welsh, early American, or German, is still surviving, scattered over our 48 states, and should continue to give a good account of itself.

Statistical Methods

The third edition of this excellent text should receive the same favorable response accorded to the previous two editions, formerly reviewed in this Journal. New material in the third edition includes a chapter on the design and analysis of samplings, new illustrations of various transformations, tests for homogeneity of variance in groups which may have unequal numbers of items, and the analysis of variance in regression. The new edition is under the imprint of the Iowa State College Press and is beautifully bound and printed.—*L. H. S*

Statistical Methods, by George W. Snedecor. xiii + 42 pp. Ames, the Iowa State College Press. 1940. $3.75.

Shull's "Animal Biology"

The plan and nature of this standard text-book remain the same. The revision, however, is quite evident in several chapters. The function of structures receives considerably more attention and all physiological data are modernized. The chapter on embryology has been reorganized and simplified and the one on classification has been enlarged by the inclusion of some general information about each phylum. The size and general appearance of the book have not been changed.—*Carl Venard.*

Principles of Animal Biology, by A. Franklin Shull. xiv + 417 pp. 298 figs. 5th edition. New York, McGraw-Hill Book Co. 1941. $3.50.

ADDITIONS TO THE REVISED CATALOGUE OF OHIO VASCULAR PLANTS. IX*

CLYDE H. JONES

During the past year approximately 4,000 sheets have been added to the State Herbarium. This constant and widespread interest in the vegetation of the state is quite gratifying, since it is from the unified efforts of the professional and amateur botanists that our knowledge of plant distribution and migration is augmented.

Approximately 1,500 sheets have been added to the General Herbarium. This addition comprises collections from California and Nevada by A. M. Wallace; and the Salt Pond Mountain of Virginia, Bear Tooth Mountains of Montana, Wind River Mountains of Wyoming, and northern Ontario collections of the author.

Through the combined efforts of N.Y.A. students, and students of the Botany Department, a rather extensive project consisting of poisoning, mounting, and the preparing of new labels and genus covers for all specimens housed in both the State and General Herbarium has been brought to a successful termination.

In addition to the above project an herbarium of woody twigs in dormant condition has just been completed. This collection should be of value to students who wish to check their future identifications of twigs in winter.

Rapid changes in world industry and transportation during the past few months have revived an active interest in native medicinal plants and their cultivation. A project to map the distribution of all plants of known medicinal value and assemble data on their habitat requirements is now under way.

The following list of additions represent new county or state records.

8. *Osmunda regalis* L. Royal-fern. Bidwell, Gallia Co. Clyde H. Jones.
27. *Asplenium montanum* Willd. Mountain Spleenwort. Nile Twp., Scioto Co. Floyd B. Chapman.
30. *Athyrium angustum* (Willd.) Presl. Upland Lady-fern. Ridge Twp., Van Wert Co. M. B. Overholt. Waverly-Peck Rd., Pike Co. Gordon S. Crowl.
35. *Dryopteris cristata* (L.) Gr. Crested Shield-fern. Bidwell, Gallia Co. Clyde H. Jones.

*Papers from the Department of Botany, The Ohio State University, No. 437.

38. *Dryopteris marginalis* (L.) Gr. Marginal Shield-fern. Mohican Dam, Coshocton Co. W. G. Stover.
42. *Polystichum acrostichoides* (Mx.) Schott. Christmas-fern. Knox Co. L. E. Yarman.
45. *Cystopteris fragilis* (L.) Bernh. Fragile Bladder-fern. Ridge Twp., Van Wert Co. M. B. Overholt. Jackson Twp., Perry Co. William Goslin.
53. *Equisetum laevigatum* A. Br. Smooth Scouring-rush. Paxton Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
55. *Equisetum kansanum* Schaffn. Kansas Scouring-rush. Clyde, Sandusky Co. W. G. Stover.
59. *Equisetum fluviatile* L. Water Horsetail. Harmony Twp., Clark Co. Edward S. Thomas.
61. *Equisetum arvense* L. Field Horsetail. Berne Twp., Fairfield Co. Robert Goslin.
70. *Picea abies* (L.) Karst. Norway Spruce. Planted. Prichard Hollow, Ross Co. Gordon S. Crowl.
73. *Pinus strobus* L. White Pine. Planted. Liberty Twp., Jackson Co. Floyd Bartley and Leslie L. Pontius.
77. *Thuja occidentalis* L. American Arborvitae. Union Co. B. F. DeHays.
79. *Juniperus virginiana* L. Red Juniper. Adams and Scioto Co. Clyde H. Jones.
81. *Taxus canadensis* Marsh. American Yew. Hanover Twp., Richland Co. John H. Schaffner.
94. *Potamogeton americanus* Cham. & Schl. Long-leaf Pondweed. Tiverton Twp., Coshocton Co. F. B. Selby.
117. *Castalia odorata* (Dry.) W. & W. Sweet-scented Water-lily. Buckeye Lake, Fairfield Co. William Goslin.
119. *Philotria canadensis* (Mx.) Britt. Common Water-weed. Tiverton Twp., Coshocton Co. F. B. Selby.
120. *Vallisneria spiralis* L. Tape-grass. Tuscarawas Twp., Coshocton Co. F. B. Selby.
125. *Typha latifolia* L. Broad-leaf Cat-tail. Berne Twp., Fairfield Co. William Goslin.
126. *Typha angustifolia* L. Narrow-leaf Cat-tail. McArthur, Vinton Co. Clyde H. Jones.
127. *Acorus calamus* L. Sweet-flag. Garrettsville, Portage Co. Don M. Brown. Hocking Twp., Fairfield Co. William Goslin.
129. *Spathyema foetida* (L.) Raf. Skunk-cabbage. Pleasant Twp., Fairfield Co. William Goslin.
131. *Arisaema dracontium* (L.) Schott. Green-dragon. Ridge Twp., Van Wert Co. M. B. Overholt. Adams and Scioto Co. Clyde H. Jones.
132. *Arisaema triphyllum* (L.) Torr. Jack-in-the-pulpit. Ridge Twp., Van Wert Co. M. B. Overholt.
143. *Scirpus atrovirens* Muhl. Dark-green Bulrush. Charm, Holmes Co. Don M. Brown.
154. *Fimbristylis autumnalis* (L.) R. & S. Slender Fimbristylis. Scioto Co. Conrad Roth and Floyd B. Chapman. Huntington Twp., Gallia Co. Clyde H. Jones.
157. *Eleocharis compressa* Sull. Flat-stemmed Spike-rush. Adams Co. Floyd Bartley and Leslie L. Pontius.
166. *Stenophyllus capillaris* (L.) Britt. Hair-like Stenophyllus. Scioto Co. Floyd B. Chapman.
168. *Cyperus strigosus* L. Straw-colored Cyperus. Huntington Twp., Gallia Co. Clyde H. Jones.
178. *Cyperus flavescens* L. Yellow Cyperus. Brady Lake, Portage Co. Don M. Brown.
195. *Carex rosea* Schk. Stellate Sedge. Clarkson, Columbiana Co. Don M. Brown.
217. *Carex trisperma* Dew. Three-fruited Sedge. Ashland Co. Floyd Bartley and Leslie L. Pontius.
226. *Carex incomperta* Bickn. Prickly Bog Sedge. Bidwell, Gallia Co. Clyde H. Jones.

228. *Carex scoparia* Schk. Pointed Broom Sedge. Perry Twp., Stark Co. Don M. Brown.
229. *Carex tribuloides* Wahl. Blunt Broom Sedge. Phalanx Mills, Trumbull Co. and Perry Twp., Stark Co. Don M. Brown.
249. *Carex gynandra* Schw. Nodding Sedge. Brown Twp., Carroll Co. Don M. Brown.
250. *Carex crinita* Lam. Fringed Sedge. Clarkson, Columbiana Co. and Canton Twp., Stark Co. Don M. Brown. Bidwell, Gallia Co. Clyde H. Jones.
318. *Carex squarrosa* L. Squarrose Sedge. Canton Twp., Stark Co. Don M. Brown.
326. *Bromus kalmii* Gr. Kalm's Chess. Deercreek Twp., Pickaway Co. Floyd Bartley and Leslie L. Pontius.
328. *Bromus secalinus* L. Common Chess. Greenville, Darke Co. Dale W. Jenkins.
332. *Bromus inermis* Leyss. Hungarian Brome-grass. Hamburg, Fairfield Co.
334. *Bromus purgans* L. Hairy Brome-grass. Deercreek Twp., Pickaway Co. Leslie L. Pontius and Floyd Bartley.
340. *Festuca nutans* Willd. Nodding Fescue-grass. Dayton, Montgomery Co. Alfred Lonsing.
342. *Festuca ovina* L. Sheep Fescue-grass. Cedar Falls, Adams Co. Floyd Bartley and Leslie L. Pontius.
344. *Festuca octoflora* Walt. Slender Fescue-grass. Scioto Co. Glenn W. Blaydes.
353. *Uniola latifolia* Mx. Broad-leaf Spike-grass. Franklin Co. W. G. Dore.
362. *Poa pratensis* L. Kentucky Blue-grass. Ridge Twp., Van Wert Co. M. B. Overholt.
366. *Eragrostis pectinacea* (Mx.) Steud. Purple Love-grass. Franklin Co. W. G. Dore.
367. *Eragrostis hypnoides* (Lam.) B. S. P. Creeping Love-grass. Green Twp., Scioto Co. Floyd B. Chapman and Conrad Roth.
368. *Eragrostis major* Host. Strong-scented Love-grass. Pleasant Twp., Clark Co. Clyde H. Jones.
373. *Eragrostis capillaris* (L.) Ness. Capillary Love-grass. Adams Co. Floyd Bartley and Leslie L. Pontius.
378. *Korycarpus arundinaceus* Zea. American Korycarpus. Hocking Co. W. G. Dore.
379. *Tridens flava* (L.) Hitchc. Tall Purple-top. Hocking Co. W. G. Dore.
383. *Danthonia spicata* (L.) Beauv. Common Wild-oat-grass. Franklin Co. W. G. Dore. Deercreek Twp., Pickaway Co. Floyd Bartley and Leslie L. Pontius.
397. *Sporobolus asper* (Mx.) Kunth. Longleaf Rush-grass. Lancaster, Fairfield Co. Elida, Allen Co.
415. *Phleum pratense* L. Timothy. Ridge Twp., Van Wert Co. M. B. Overholt.
429. *Aristida oligantha* Mx. Few-flowered Triple-awned-grass. Cedar Grove, Hocking Co. W. G. Stover. Mt. Vernon, Knox Co. Eugene Good.
447. *Elymus striatus* Willd. Slender Wild-rye. Franklin Co. W. G. Dore.
452. *Hordeum jubatum* L. Squirrel-tail Barley. Ridge Twp., Van Wert Co. M. B. Overholt.
453. *Spartina michauxiana* Hitchc. Tall Slough-grass. Warren Co.Floyd Bartley and Leslie L. Pontius. Mt. Vernon, Knox Co. Eugene Good.
471. *Panicum capillare* L. Trumble Panic-grass. Adams Co. Clyde H. Jones.
474. *Panicum depauperatum* Muhl. Starved Panic-grass. Knox Co. Eugene Good.
476. *Panicum scribnerianum* Nash. Scribner's Panic-grass. Pleasant Twp., Clark Co. Clyde H. Jones.
479. *Panicum linearifolium* Scribn. Linear-leaf Panic-grass. Franklin Co. W. G. Dore.
482. *Panicum sphaerocarpon* Ell. Round-fruited Panic-grass. Deercreek Twp., Pickaway Co. Floyd Bartley and Leslie L. Pontius.
486.1. *Panicum barbulatum* Michx. Scioto Co. Clyde H. Jones.
490. *Panicum tsugetorum* Nash. Hemlock Panic-grass. Plain Twp., Stark Co. Don M. Brown.

491. *Panicum villosissimum* Nash. Villous Panic-grass. Deercreek Twp., Pickaway Co. and Warren Co. Floyd Bartley and Leslie L. Pontius.
495. *Panicum commutatum* Schultes. Variable Panic-grass. Scioto Co. Clyde H. Jones.
497. *Panicum latifolium* L. Broad-leaf Panic-grass. Hocking Co. W. G. Dore.
498. *Panicum boscii* Poir. Bosc's Panic-grass. Ross-Hocking Park, Ross Co. and Vinton Co. William Goslin. Scioto Co. Clyde H. Jones.
499. *Leptoloma cognatum* (Schultes) Chase. Fall Witch-grass. Ashtabula Co. W. G. Dore.
503. *Echinochloa crus-galli* (L.) Beauv. Common Barnyard-grass. Canton Twp., Stark Co. Don M. Brown.
510. *Chaetochloa viridis* (L.) Scribn. Green Foxtail-grass. Knox Co. L. E. Yarman.
512. *Chaetochloa glauca* (L.) Scribn. Yellow Foxtail-grass. Franklin Co. W. G. Dore.
512.1. *Pennisetum alopecuroides* (L.) Spreng. Franklin Co. W. G. Dore. Brookville, Montgomery Co. Delzie Demaree.
516. *Sorghastrum nutans* (L.) Nash. Indian-grass. Logan Co. Pleasant Twp., Clark Co. Clyde H. Jones.
519. *Andropogon furcatus* Muhl. Big Bluestem. Pleasant Twp., Clark Co. Clyde H. Jones.
522. *Andropogon scoparius* Mx. Little Bluestem. Black Lake, Logan Co. Cutler, Athens Co. W. P. Porter and P. S. Wamsley.
526. *Lilium superbum* L. Turk's-cap Lily. Jackson Twp., Pickaway Co. Floyd Bartley and Leslie L. Pontius.
527. *Lilium canadense* L. Canada Lily. Knox Co.. Katie M. Roads. Warren Co. Floyd Bartley and Leslie L. Pontius. Washington Twp., Van Wert Co. M. B. Overholt.
533.1. *Hosta caerulea* Tratt. Common Plantain-lily. Auglaize Co. William Kayser.
534. *Allium tricoccum* Ait. Wild Leek. Adams Co. Floyd Bartley and Leslie L. Pontius.
535. *Allium vineale* L. Field Garlic. Lancaster, Fairfield Co. Robert Goslin.
538. *Allium canadense* L. Meadow Garlic. Cliff Creek, Ross Co. Gordon S. Crowl.
539. *Allium cernuum* Roth. Nodding Onion. Scioto Co. Clyde H. Jones.
541. *Quamasia hyacinthina* (Raf.) Britt. Wild Hyacinth. Oxford Twp., Tuscarawas Co. Floyd Von Ohlen.
544. *Ornithogalum umbellatum* L. Star-of-Bethlehem. Berne Twp., Fairfield Co. Robert Goslin.
547. *Aletris farinosa* L. Colic-root. Liberty and Plain Twps., Wood Co. R. E. Shanks.
551. *Anticlea elegans* (Pursh) Rydb. Glaucous Anticlea. Mantua, Portage Co. Don M. Brown.
552. *Stenanthium robustum* Wats. Stout Stenanthium. Gallia Co. Floyd Bartley and Leslie L. Pontius.
563. *Uvularia sessilifolia* L. Sessile-leaf Bellwort. Omega, Pike Co. Gordon S. Crowl. Warwick Twp., Tuscarawas Co. Irma Nelson.
564. *Uvularia perfoliata* L. Perfoliate Bellwort. Adams and Scioto Co. Clyde H. Jones.
565. *Uvularia grandiflora* Sm. Large-flowered Bell-wort. Hocking Twp., Fairfield Co. William Goslin.
569. *Polygonatum commutatum* (R. & S.) Dietr. Smooth Solomon's-seal. Hocking Co. B. F. DeHays.
572. *Vagnera stellata* (L.) Mor. Stellate False Solomon's-seal. Ridge Twp., Van Wert Co. M. B. Overholt.
574. *Unifolium canadense* (Desf.) Greene. False Lily-of-the-valley. Coshocton Co. F. B. Selby.
578. *Asparagus officinalis* L. Asparagus. Ridge Twp., Van Wert Co. M. B. Overholt. Greenfield Twp., Fairfield Co. William Goslin.
580. *Smilax herbacea* L. Common Carrion-flower. Ridge Twp., Van Wert Co. M. B. Overholt. Berne Twp., Fairfield Co. William Goslin.
583. *Smilax hispida* Muhl. Hispid Greenbrier. Pike Co. Gordon S. Crowl.

584. *Smilax rotundifolia* L. Round-leaf Greenbrier. Ridge Twp., Van Wert Co. M. B. Overholt.
588. *Tradescantia virginiana* L. Virginia Spiderwort. Berne Twp., Fairfield Co. William Goslin.
590. *Commelina communis* L. Asiatic Day-flower. Pike Co. Gordon S. Crowl.
597.2. *Juncus secundus* Beuv. Secund Rush. Perry Twp., Shelby Co., and Neotoma, Hocking Co. R. E. Shanks.
597.3. *Juncus vaseyi* Engelm. No record. Correction made by R. E. Shanks.
598. *Juncus bufonius* L. Toad Rush. Scioto Co. Floyd B. Chapman and Conrad Roth.
614. *Xyris flexuosa* Muhl. Slender Yellow-eyed-grass. Madison Twp., Scioto Co. Floyd B. Chapman.
625. *Sisyrinchium albidum* Raf. White Blue-eyed-grass. Pleasant Twp., Clark Co. Clyde H. Jones.
633. *Iris cristata* Ait. Crested Dwarf Iris. Gallia Co. A. C. Priestly.
639. *Galeorchis spectabilis* (L.) Rydb. Showy Orchis. Winesburg, Holmes Co. Don M. Brown.
654. *Ibidium cernuum* (L.) House. Nodding Lady's-tresses. Monroe Twp., Coshocton Co. F. B. Selby. Greenfield Twp., Fairfield Co. Robert Goslin.
657. *Ibidium praecox* (Walt.) House. Grass-leaf Lady's-tresses. Mt. Vernon, Knox Co. Eugene Good.
658. *Ibidium gracile* (Bigel.) House. Slender Lady's-tresses. La Fayette Twp., Coshocton Co. F. B. Selby.
673. *Corallorrhiza wisteriana* Conrad. Wister's Coral-root. Polk Hollow, Adams Co. Floyd Bartley and Leslie L. Pontius. Greenfield Twp., Fairfield Co. Robert Goslin.
678. *Magnolia acuminata* L. Cucumber Magnolia. Hocking Twp., Fairfield Co. Robert Goslin.
680. *Asimina triloba* (L.) Dunal. Papaw. Ridge Twp., Van Wert Co. M. B. Overholt. Garrettsville, Portage Co. Don M. Brown.
681. *Ranunculus abortivus* L. Kidney-leaf Crowfoot. Ridge Twp., Van Wert Co. M. B. Overholt.
682. *Ranunculus micranthus* Nutt. Rock Crowfoot. Pleasant Twp., Fairfield Co. Robert Goslin.
683. *Ranunculus sceleratus* L. Celery-leaf Crowfoot. Berne Twp., Fairfield Co. Robert Goslin.
684. *Ranunculus recurvatus* Poir. Hooked Crowfoot. Ross Co. Floyd Bartley and Leslie L. Pontius.
687. *Ranunculus acris* L. Tall Buttercup. Lancaster, Fairfield Co. William Goslin.
697. *Batrachium trichophyllum* (Chaix.) Schultz. White Water-crowfoot. Green Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
698. *Batrachium circinatum* (Sibth.) Rchb. Circinate White Water-crowfoot. Muskingum Co. Floyd Von Ohlen.
713. *Anemone quinquefolia* L. Wind-flower. Monroe Twp., Coshocton Co. F. B. Selby.
715. *Hepatica acutiloba* DC. Sharp-lobed Liver-leaf. Goodhope Twp., Hocking Co. William Goslin.
720. *Hydrastis canadensis* L. Golden-seal. Hocking Co. William Goslin.
722. *Actaea alba* (L.) Mill. White Baneberry. Loudenville, Ashland Co. Don M. Brown. Hospital Grounds, Athens, Athens Co. Warren Abbott.
728. *Thalictrum polygamum* Muhl. Tall Meadow-rue. Lawrence Twp., Tuscarawas Co. and Sugar Creek Twp., Stark Co. Don M. Brown.
734. *Berberis thunbergii* DC. Japanese Barberry. Escaped in Stark Co. Ted Grisez.
734.1. *Berberis ottawensis* Schneck. (*B. thunbergii* x *B. vulgaris*) Camden, Preble Co. Olivia Hambleton.
736. *Jeffersonia diphylla* (L.) Pers. Twinleaf. Union Co. B. F. DeHays.
737. *Podophyllum peltatum* L. May-apple. Ridge Twp., Van Wert Co. M. B. Overholt. Hocking Co. B. F. DeHays. Berne Twp., Fairfield Co. William Goslin.

738. *Menispermum canadense* L. Moonseed. Berne Twp., Fairfield Co. William Goslin. Union Co. B. F. DeHays.
745. *Papaver rhoeas* L. Field Poppy. Berne Twp., Fairfield Co. William Goslin.
750. *Sanguinaria canadensis* L. Bloodroot. Berne Twp., Fairfield Co. William Goslin.
754. *Bicuculla cucullaria* (L.) Millsp. Dutchman's-breeches. Ridge Twp., Van Wert Co. M. B. Overholt. Berne Twp., Fairfield Co. William Goslin. Athens, Athens Co. Warren Abbott.
755. *Bicuculla canadensis* (Goldie) Millsp. Squirrel-corn. Athens, Athens Co. Warren Abbott.
756. *Adlumia fungosa* (Ait.) Greene. Climbing Fumitory. Tiverton Twp., Coshocton Co. F. B. Selby.
765. *Draba verna* L. Vernal Whitlow-grass. Pleasant Twp., Fairfield Co. William Goslin.
770. *Camelina microcarpa* Andrz. Small-fruited False-flax, Ross Co. Floyd Bartley and Leslie L. Pontius. Tiverton Twp., Coshocton Co. F. B. Selby. Berne Twp., Fairfield Co. William Goslin.
771. *Bursa bursa-pastoris* (L.) Britt. Shepherd's-purse. Lancaster, Fairfield Co. William Goslin. Athens, Athens Co. Warren Abbott.
773. *Armoracia armoracia* (L.) Britt. Horseradish. Berne Twp., Fairfield Co. William Goslin.
777. *Radicula palustris* (L.) Moench. Marsh Yellow-cress. Berne Twp., Fairfield Co. William Goslin.
779. *Lepidium campestre* (L.) R. Br. Field Peppergrass. Washington Co. C. J. Willard. Ridge Twp., Van Wert Co. M. B. Overholt.
783. *Lepidium densiflorum* Schrad. Wild Peppergrass. Phalanx Mills, Trumbull Co. Don M. Brown.
796. *Erysimum officinale* L. Hedge-mustard. Berne Twp., Fairfield Co. William Goslin. Marion Prairie, Marion Co. Clyde H. Jones.
797. *Norta altissima* (L.) Britt. Tall Hedge-mustard. Berne Twp., Fairfield Co. Robert Goslin.
802. *Barbarea vulgaris* R. Br. Yellow Winter-cress. Ridge Twp., Van Wert Co. M. B. Overholt. Berne Twp., Fairfield Co. William Goslin.
805. *Iodanthus pinnatifidus* (Mx.) Steud. Purple Rocket. Berne Twp., Fairfield Co. William Goslin. Adams and Scioto Co. Clyde H. Jones.
810. *Arabis laevigata* (Muhl.) Poir. Smooth Rock-cress. Madison Co. A. E. Waller and J. N. Wolfe. Pleasant Twp., Fairfield Co. Robert Goslin.
811. *Arabis canadensis* L. Sickle-pod Rock-cress. Berne Twp., Fairfield Co. William Goslin. Feightner Church, Ross Co. Gordon S. Crowl.
816. *Cardamine douglassii* (Torr.) Britt. Purple Bitter-cress. Pleasant Twp., Fairfield Co William Goslin.
817. *Cardamine bulbosa* (Schreb.) B. S. P. Bulbous Bitter-cress Pleasant Twp., Clark Co. Clyde H. Jones
832. *Sinapis arvensis* L. Corn Mustard. Berne Twp., Fairfield Co. Robert Goslin.
837. *Brassica napus* L. Rape. Lancaster, Fairfield Co. William Goslin.
843. *Polanisia graveolens* Raf. Clammy-weed. Paris Twp., Stark Co. Don M. Brown.
848. *Geranium maculatum* L. Wild Crane's-bill. Ridge Twp., Van Wert Co. M. B. Overholt.
854. *Robertiella robertiana* (L.) Hanks. Herb-Robert. Lawrence Twp., Tuscarawas Co. Don M. Brown.
856. *Oxalis grandis* Small. Great Wood-sorrel. Ridge Twp., Van Wert Co. M. B. Overholt. Vinton Co. William Goslin.
857. *Oxalis stricta* L. Upright Wood-sorrel. Lancaster, Fairfield Co. William Goslin.
868. *Linum virginianum* L. Virginia Flax. Madison Twp., Fairfield Co. Edward S. Thomas, Gene and Helen Rea.
873. *Impatiens biflora* Walt. Spotted Touch-me-not. Ridge Twp., Van Wert Co. M. B. Overholt. Rockbridge, Hocking Co. William and Robert Goslin.
874. *Impatiens pallida* Nutt. Pale Touch-me-not. Berne Twp., Fairfield Co. William and Robert Goslin.

876. *Zanthoxylum americanum* Mill. Prickly-ash. Union Co. B. F. DeHays.
881. *Polygala senega* L. Seneca Snakeroot. Scioto Co. Clyde H. Jones.
882. *Polygala viridescens* L. Purple Milkwort. La Fayette Twp., Coshocton Co. F. B. Selby.
888. *Acalypha virginica* L. Virginia Three-seeded Mercury. Berne Twp., Fairfield Co. Robert Goslin.
889. *Acalypha gracilens* Gr. Slender Three-seeded Mercury. Greenfield Twp., Fairfield Co. Robert Goslin.
891. *Croton capitatus* Mx. Capitate Croton. Green Twp., Adams Co. Edward S. Thomas.
892. *Croton monanthogynus* Mx. Single-fruited Croton. Meigs Co. Conrad Roth.
895. *Poinsettia dentata* (Mx.) Small. Toothed Spurge. New Castle Twp., Coshocton Co. F. B. Selby. Berne Twp., Fairfield Co. Robert Goslin. Pleasant Twp., Clark Co. Clyde H. Jones.
905. *Tithymalopsis corollata* (L.) Kl. & Garcke. Flowering Spurge. Marion Prairie. Marion Co. Clyde H. Jones.
906. *Euphorbia marginata* Pursh. Snow-on-the-mountain. Escaped in Louisville, Stark Co. Ted Grisez.
912. *Chamaesyce serpens* (H. B. K.) Small. Roundleaf Spurge. Marion Prairie, Marion Co. Clyde H. Jones.
914. *Callitriche heterophylla* Pursh. Larger Water-starwort. Clark Twp., Coshocton Co. F. B. Selby. Perry Twp., Stark Co. Don M. Brown.
917. *Malva rotundifolia* L. Roundleaf Mallow. Lancaster, Fairfield Co. William Goslin.
924. *Sida hermaphrodita* (L.) Rusby. Tall Sida. Adams Co. Conrad Roth.
926. *Abutilon abutilon* (L.) Rusby. Velvet-leaf. Berne Twp., Fairfield Co. William Goslin. Knox Co. L. E. Yarman.
927. *Hibiscus syriacus* L. Shrubby Hibiscus. Knox Co. L. E. Yarman.
930. *Hibiscus militaris* Cav. Halberd-leaf Rose-mallow. Napoleon, Henry Co. Floyd B. Chapman.
931. *Hibiscus trionum* L. Bladder Ketmia. Ridge Twp., Van Wert Co. M. B. Overholt. Berne Twp., Fairfield Co. William and Robert Goslin.
934. *Tilia heterophylla* Vent. White Linden. Ross and Jackson Co. Floyd Bartley and Leslie L. Pontius. Adams Co. Robert B. Gordon and Arthur Harper. Monroe Co. W. A. Kellerman.
937. *Hypericum prolificum* L. Shrubby St. John's-wort. Muskingum Co. Floyd Von Ohlen.
939. *Hypericum perforatum* L. Common St. John's-wort. Hocking Twp., Fairfield Co. William Goslin.
940. *Hypericum punctatum* Lam. Spotted St. John's-wort. Athens, Athens Co. Warren Abbott. Knox Co. L. E. Yarman.
943. *Hypericum boreale* (Britt.) Bickn. Northern St. John's-wort. Wingfoot Lake, Portage Co. Don M. Brown.
963. *Viola canadensis* L. Canada Violet. Salt Creek, Ross Co. Gordon S. Crowl. Adams Co. Clyde H. Jones.
967. *Viola striata* Ait. Striped Violet. Pleasant Twp., Van Wert Co. M. B. Overholt.
968. *Viola conspersa* Reich. American Dog Violet. Cedar Swamp, Champaign Co. Edward S. Thomas.
970. *Viola rostrata* Pursh. Long-spurred Violet. Goodhope Twp., Hocking Co. William Goslin.
978. *Viola cucullata* Ait. Marsh Blue Violet. Pleasant Twp., Clark Co. Clyde H. Jones.
979. *Viola affinis* LeC. Thinleaf Blue Violet. Neotoma, Hocking Co. Edward S. Thomas. Clifton Gorge, Green Co. C. F. Walker and J. W. Sites.
981. *Viola sororia* Willd. Woolly Blue Violet. Hocking Twp., Fairfield Co. Robert Goslin. Ridge Twp., Van Wert Co. M. B. Overholt.
984. *Viola palmata* L. Early Blue Violet. Hocking Twp., Fairfield Co. William Goslin.
988. *Viola sagittata* Ait. Arrow-leaf Violet. Kettle Hills, Fairfield Co. Robert Goslin. Marion Prairie, Marion Co. Clyde H. Jones.
1001. *Alsine media* L. Common Chickweed. Berne Twp., Fairfield Co. William Goslin.

1002. *Alsine pubera* (Mx.) Britt. Great Chickweed. Salt Creek, Ross Co. Gordon S. Crowl. Ridge Twp., Van Wert Co. M. B. Overholt.
1010. *Cerastium longipedunculatum* Muhl. Nodding Chickweed. Berne Twp., Fairfield Co. William Goslin. Madison Co. A. E. Waller and J. N. Wolfe. Scioto Co. Clyde H. Jones.
1015. *Lychnis alba* Mill. White Lychnis. Berne Twp., Fairfield Co. William Goslin.
1020. *Silene latifolia* (Mill.) Britt. & Rend. Bladder Campion. Berne Twp., Fairfield Co. William Goslin.
1031. *Silene antirrhina* L. Sleepy Catchfly. Kettle Hills, Fairfield Co. William Goslin.
1032. *Saponaria officinalis* L. Bouncing-Bet. Knox Co. L. E. Yarman.
1035. *Dianthus armeria* L. Deptford Pink. Berne Twp., Fairfield Co. William Goslin. Adams Co. Clyde H. Jones.
1038. *Claytonia virginica* L. Spring-beauty. Lancaster, Fairfield Co. William Goslin. Ridge Twp., Van Wert Co. M. B. Overholt.
1043. *Phytolacca americana* L. Pokeweed. Berne Twp., Fairfield Co. William Goslin. Ridge Twp., Van Wert Co. M. B. Overholt.
1044. *Allionia nyctaginea* Mx. Heart-leaf Umbrella-wort. Canton Twp., Stark Co. Don M. Brown.
1051. *Amaranthus retroflexus* L. Rough Pigweed. Marion Prairie, Marion Co. Clyde H. Jones.
1052. *Amaranthus hybridus* L. Slender Pigweed. Lancaster, Fairfield Co. Robert Goslin.
1080. *Steironema ciliatum* (L.) Raf. Fringed Yellow Loosestrife. Ridge Twp., Van Wert Co. M. B. Overholt.
1089. *Anagallis arvensis* L. Scarlet Pimpernel. Ross Co. Gordon S. Crowl.
1092. *Dodecatheon meadia* L. Shooting-star. Warren Co. Floyd Bartley and Leslie L. Pontius. Buzzard's Roost, Adams Co. J. P. Steele.
1094. *Rumex verticillatus* L. Swamp Dock. Buckeye Lake, Fairfield Co. William Goslin.
1101. *Rumex crispus* L. Curled Dock. Union Co. B. F. DeHays.
1102. *Rumex acetosella* L. Sheep Sorrel. Franklin Co. Clyde H. Jones. Berne Twp., Fairfield Co. William Goslin.
1103. *Pleuropterus zuccarinii* Small. Japanese Knotweed. Scioto Co. Conrad Roth.
1105. *Tiniaria scandens* (L.) Small. Climbing False Buckwheat. Hocking Twp., Fairfield Co. William Goslin.
1107. *Fagopyrum fagopyrum* (L.) Karst. Buckwheat. Berne Twp., Fairfield Co. William and Robert Goslin.
1109. *Tracaulon arifolium* (L.) Raf. Halberd-leaf Tear-thumb. Scioto Co. Floyd B. Chapman and Conrad Roth. Athens, Athens Co. Walter P. Porter and P. S. Wamsley.
1112. *Persicaria persicaria* (L.) Small. Lady's-thumb. Berne Twp., Fairfield Co. Robert and William Goslin. Ridge Twp., Van Wert Co. M. B. Overholt.
1114. *Persicaria punctata* (Ell.) Small. Dotted Smartweed. Berne Twp., Fairfield Co. William and Robert Goslin.
1115. *Persicaria hydropiper* (L.) Opiz. Water Smartweed. Berne Twp., Fairfield Co. William Goslin.
1117. *Persicaria pennsylvanica* (L.) Small. Pennsylvania Persicaria. Berne Twp., Fairfield Co. William Goslin.
1128. *Geum vernum* (Raf.) T. & G. Spring Avens. Ridge Twp., Van Wert Co. M. B. Overholt. Berne Twp., Fairfield Co. William Goslin.
1129. *Geum canadense* Jacq. White Avens. Pike Co. Gordon S. Crowl.
1130. *Geum virginianum* L. Rough Avens. Pleasant Twp., Fairfield Co. William Goslin.
1132. *Geum strictum* Ait. Yellow Avens. Ridge Twp., Van Wert Co. M. B. Overholt. Tar Hollow, Ross Co. Gordon S. Crowl.
1133. *Dasiphora fruticosa* (L.) Rydb. Shrubby Cinquefoil. Warren Co. Floyd Bartley and Leslie L. Pontius.
1135. *Potentilla monspeliensis* L. Rough Cinquefoil. Tar Hollow, Ross Co. Gordon S. Crowl. Ridge Twp., Van Wert Co. M. B. Overholt.

1136. *Potentilla recta* L. Upright Cinquefoil. Berne Twp., Fairfield Co. Robert Goslin.
1138. *Potentilla canadensis* L. Common Five-finger. Berne Twp., Fairfield Co. William Goslin.
1144. *Waldsteinia fragarioides* (Mx.) Tratt. Dry Strawberry. Lancaster, Fairfield Co. Robert Goslin.
1145. *Fragaria virginiana* Duch. Virginia Strawberry. Bloomfield Twp., Trumbull Co. R. E. Shanks. Lancaster, Fairfield Co. William Goslin. Ross Hollow, Ross Co. Gordon S. Crowl.
1146.1. *Fragaria grayana* Vilmorin. Gray's Strawberry. Dayton, Montgomery Co. Alfred Lonsing.
1148. *Rubus odoratus* L. Rose-flowered Raspberry. Mt. Vernon, Knox Co. Eugene Good.
1150. *Rubus occidentalis* L. Black Raspberry. Berne Twp., Fairfield Co. Ridge Twp., Van Wert Co. M. B. Overholt.
1154. *Rubus frondosus* Bigel. Leafy-flowered Blackberry. Berne Twp., Fairfield Co. William Goslin.
1160. *Porteranthus stipulatus* (Muhl.) Britt. American Ipecac. Berne Twp., Fairfield Co. Edward S. Thomas and Charles E. Walker.
1162. *Filipendula rubra* (Hill.) Rob. Queen-of-the-prairie. Warren Co. Floyd Bartley and Leslie L. Pontius.
1170. *Rosa setigera* Mx. Prairie Rose. Berne Twp., Fairfield Co. William Goslin. Ridge Twp., Van Wert Co. M. B. Overholt. Palestine, Darke Co., Carroll, Carroll Co., Columbus Grove, Putnam Co., Kenton, Hardin Co., Paulding, Paulding Co. W. G. Stover.
1171. *Rosa rubiginosa* L. Sweetbrier. Maumee, Lucas Co. W. G. Stover.
1174. *Rosa blanda* L. Smooth Rose. Scioto Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1177. *Rosa carolina* L. Swamp Rose. Rattlesnake Knob, Ross Co. Gordon S. Crowl. Palestine, Darke Co., Cynthiana, Pike Co., Columbiana, Columbiana Co., Maumee, Lucas Co. W. G. Stover.
1178. *Rosa virginiana* Mill. Virginia Rose. Pike Co. Gordon S. Crowl. Sinking Springs, Highland Co., New Philadelphia, Tuscarawas Co., Miller City, Putnam Co., Rome, Franklin Co., Upper Sandusky, Wyandot Co., Columbiana, Columbiana Co., Crawford Co. W. G. Stover.
1179. *Agrimonia parviflora* Sol. Small-flowered Agrimony. Ridge Twp., Van Wert Co. M. B. Overholt.
1194. *Prunus americana* Marsh. Wild Plum. Fairfield Co. Emma A. Ruppersberg.
1199. *Pyrus communis* L. Pear. Louisville, Stark Co. Escaped from cultivation. Ted Grisez.
1206. *Amelanchier canadensis* (L.) Med. Common Juneberry. Berne Twp., Fairfield Co. Robert Goslin.
1215.1. *Crataegus ovatifolia* Sarg. Ashtabula, Ashtabula Co., and Perry, Lake Co. Harry Crofoot and F. J. Tyler.
1219. *Crataegus macrosperma* Ashe. Variable Hawthorn. Lake and Ashtabula Co. Fred J. Tyler and Harry Crofoot.
1223.1. *Crataegus assurgens* Sarg. Harry Crofoot and Fred J. Tyler.
1233. *Gymnocladus dioica* (L.) Koch. Coffee-bean. Knox Co. L. E. Yarman.
1237. *Chamaecrist nictitans* (L.) Moench. Small-flowered Sensitive-pea. Doughty Creek, Holmes Co. Don M. Brown. La Fayette Twp., Coshocton Co. F. B. Selby.
1239. *Baptisia leucantha* T. & G. Large White Wild-indigo. Delaware Co. B. F. DeHays.
1241. *Crotalaria sagittalis* L. Rattlebox. Huntington Twp., Gallia Co. Clyde H. Jones.
1245. *Medicago sativa* L. Alfalfa. Greenfield Twp., Fairfield Co. William Goslin.
1249. *Trifolium procumbens* L. Low Hop Clover. Ridge Twp., Van Wert Co. M. B. Overholt. Goodhope Twp., Hocking Co. Edward S. Thomas and Charles E. Walker.
1253. *Trifolium pratense* L. Red Clover. Lancaster, Fairfield Co. William Goslin.
1256. *Trifolium hybridum* L. Alsike Clover. Knox Co. L. E. Yarman. Tar Hollow, Ross Co. Gordon S. Crowl.

1257. *Trifolium repens* L. White Clover. Berne Twp., Fairfield Co. William Goslin.
1264. *Robinia hispida* L. Rose Acacia. Muskingum Co. Floyd Von Ohlen.
1268.1. *Petalostemum foliosum* A. Gray. Leafy Prairie-clover. Cedar Grove, Hocking Co. W. G. Stover.
1269. *Psoralea onobrychis* Nutt. Sainfoin Psoralea. Adams and Scioto Co. Clyde H. Jones.
1279. *Meibomia paniculata* (L.) Ktz. Panicled Tick-trefoil. Cutler, Athens Co. W. P. Porter and P. S. Wamsley.
1280. *Meibomia canadensis* (L.) Ktz. Canadian Tick-trefoil. Mantua, Portage Co. Don M. Brown.
1282. *Meibomia marylandica* (L.) Ktz. Maryland Tick-trefoil. Cutler, Athens Co. W. P. Porter and P. S. Wamsley.
1287.1. *Meibomia laevigata* (Nutt.) Ktz. Madison Twp., Fairfield Co. Edward S. Thomas, Gene and Helen Rea.
1294. *Lespedeza frutescens* (L.) Britt. Wand-like Bush-clover. Newark, Licking Co. Eugene Good.
1295. *Lespedeza virginica* (L.) Britt. Slender Bush-clover. Lancaster, Fairfield Co. William Goslin.
1297. *Lespedeza repens* (L.) Bart. Creeping Bush-clover. Pleasant Twp., Clark Co. Clyde H. Jones.
1299. *Stylosanthes biflora* (L.) B. S. P. Pencil-flower. Madison Twp., Fairfield Co. Gene Rea.
1300. *Vicia cracca* L. Cow Vetch. Stark Co. Don M. Brown.
1310. *Lathyrus palustris* L. Marsh Pea. Deercreek Twp., Pickaway Co. Floyd Bartley and Leslie L. Pontius.
1318. *Glycine apios* L. Groundnut. Clark Twp., Coshocton Co. F. B. Selby.
1320. *Falcata pitcheri* (T. & G.) Ktz. Pitcher's Hog-peanut. Berne Twp., Fairfield Co. Robert and William Goslin.
1325.1. *Strophostyles umbellata* (Muhl.) Britt. Pink Wild Bean. Richland Co. R. T. Wareham.
1335. *Tiarella cordifolia* L. False Miterwort. Fairfield Co. L. M. Bloomfield.
1338. *Mitella diphylla* L. Two-leaf Bishop's-cap. Goodhope Twp., Hocking Co. William Goslin.
1355. *Rhamnus lanceolata* Pursh. Lance-leaf Buckthorn. Jackson Twp., Perry Co. William Goslin. Pickaway Twp., Pickaway Co. Floyd Bartley and Leslie L. Pontius.
1363. *Vitis vulpina* L. Riverside Grape. Jackson Twp., Stark Co. Don M. Brown.
1364. *Vitis cordifolia* Mx. Frost Grape. Maumee, Lucas Co. W. G. Stover.
1366. *Parthenocissus quinquefolia* (L.) Planch. Virginia-creeper. Berne Twp., Fairfield Co. William Goslin.
1367. *Euonymus atropurpureus* Jacq. Wahoo. Pickaway Co. William Goslin. Ridge Twp., Van Wert Co. M. B. Overholt.
1370. *Euonymus obovatus* Nutt. Running Strawberry-bush. Johnston Twp., Trumbull Co. R. E. Shanks.
1372. *Celastrus scandens* L. Bitter-sweet. Union Co. B. F. DeHays.
1375. *Ilex verticillata* (L.) Gr. Winterberry. Union Co. B. F. DeHays.
1378. *Aesculus hippovastanum* L. Horse-chestnut. Circleville Twp., Pickaway Co. Floyd Bartley and Leslie L. Pontius.
1381. *Acer nigrum* Mx. Black Maple. Washington Twp., Richland Co. W. P. Porter and P. S. Wamsley.
1383. *Acer spicatum* Lam. Mountain Maple. Hanover Twp., Richland Co. John H. Schaffner.
1389. *Rhus hirta* (L.) Sudw. Staghorn Sumac. Ridge Twp., Van Wert Co. M. B. Overholt.
1390. *Rhus glabra* L. Smooth Sumac. Ridge Twp., Van Wert Co. M. B. Overholt.
1392. *Toxicodendron vernix* (L.) Ktz. Poison Sumac. Louisville, Stark Co. Ted Grisez.
1393. *Toxicodendron radicans* (L.) Ktz. Poison Ivy. Ridge Twp., Van Wert Co. M. B. Overholt. Greenfield Twp., Fairfield Co. William Goslin.
1395. *Hamamelis virginiana* L. Witch-hazel. Union Co. B. F. DeHays.
1397. *Platanus occidentalis* L. Sycamore. Ridge Twp., Van Wert Co. M. B. Overholt.

1398. *Ulmus americana* L. American Elm. Ridge Twp., Van Wert Co. M. B. Overholt.
1412. *Urtica gracilis* Ait. Slender Nettle. Marion Prairie, Marion Co. Clyde H. Jones. Hocking Twp., Fairfield Co. William Goslin.
1414. *Pilea pumila* (L.) Gr. Clearweed. Pike Co. Gordon S. Crowl.
1415. *Boehmeria cylindrica* (L.) Sw. False Nettle. Clark Twp., Coshocton Co. F. B. Selby. Warren Co. Floyd Bartley and Leslie L. Pontius. Berne Twp., Fairfield Co. William Goslin.
1417. *Fagus grandifolia* Ehrh. American Beech. Ridge Twp., Van Wert Co. M. B. Overholt.
1419. *Quercus muhlenbergii* Engelm. Chestnut Oak. (Yellow Oak). Delaware, Delaware Co. C. R. Wallace.
1421. *Quercus montana* Willd. Rock Chestnut Oak. Five-mile Creek, Pike Co. Gordon S. Crowl.
1422. *Quercus bicolor* Willd. Swamp White Oak. Delaware, Delaware Co. C. R. Wallace.
1425. *Quercus macrocarpa* Mx. Bur Oak. Delaware, Delaware Co. C. R. Wallace.
1426. *Quercus imbricaria* Mx. Shingle Oak. Delaware, Delaware Co. C. R. Wallace. Jackson Twp., Perry Co. William Goslin.
1426a. *Quercus imbricaria* x *velutina* (*Q. leana* Nutt.) Lea's Oak. Tallmadge Twp., Summit Co. Fred H. Glenny.
1430. *Quercus velutina* Lam. Black Oak. Five-mile Creek, Pike Co. Gordon S. Crowl. Delaware, Delaware Co. C. R. Wallace.
1431. *Quercus coccinea* Wang. Scarlet Oak. Ridge Twp., Van Wert Co. M. B. Overholt.
1431.1. *Quercus ellipsoidalis* E. J. Hill. Hill's Oak. Delaware, Delaware Co. C. R. Wallace.
1432. *Quercus borealis* Mx. var. *maxima* (Marsh.) Ashe. Red Oak. Delaware, Delaware Co. C. R. Wallace. Muskingum Co. C. A. Dambach.
1435. *Ostrya virginiana* (Mill.) Willd. Hop-hornbeam. Union Co. B. F. DeHays.
1436. *Corylus americana* Walt. Common Hazelnut. Berne Twp., Fairfield Co. William and Robert Goslin.
1439.2. *Betula populifolia* Marsh. Gray Birch. (Probably escaped from cultivation). Brady Lake, Portage Co. Don M. Brown.
1442. *Alnus incana* (L.) Willd. Hoary Alder. Rattlesnake Knob, Ross Co. Gordon S. Crowl.
1445. *Hicoria pecan* (Marsh.) Britt. Pecan. (Probably escaped from cultivation). Clifton Gorge, Green Co. Floyd Bartley and Leslie L. Pontius.
1452. *Juglans nigra* L. Black Walnut. Pike Co. Gordon S. Crowl.
1453. *Juglans cinerea* L. Butternut. Tar Hollow, Ross Co. Gordon S. Crowl. Ridge Twp., Van Wert Co. M. B. Overholt.
1465. *Salix nigra* Marsh. Black Willow. Adams Co. Clyde H. Jones.
1480. *Salix discolor* Muhl. Pussy Willow. Homeworth, Columbiana Co. Don M. Brown.
1482. *Salix humilis* Marsh. Prairie Willow. Mt. Vernon, Knox Co. Eugene Good.
1495. *Grossularia oxyacanthoides* (L.) Mill. Smooth Gooseberry. Berne Twp., Fairfield Co. William Goslin.
1498. *Ludwigia polycarpa* Short & Peter. Many-fruited Ludwigia. Pitt Twp., Wyandot Co. Edward S. Thomas.
1500. *Isnardia palustris* L. Marsh-purslane. Oxford Twp., Coshocton Co. F. B. Selby. Berne Twp., Fairfield Co. Robert Goslin.
1501. *Chamaenerion angustifolium* (L.) Scop. Fire-weed. Berne Twp., Fairfield Co. Robert Goslin.
1502. *Epilobium lineare* Muhl. Linear-leaf Willow-herb. Madison Twp., Scioto Co. Floyd B. Chapman and Conrad Roth.
1508.1. *Anogra albicaulis* (Pursh) Britt. Prairie Evening-primrose. Introduced in lawn. Athens, Athens Co. W. P. Porter and P. S. Wamsley.
1512. *Kneiffia fruticosa* (L.) Raim. Common Sundrops. Wyandot Co. C. R. Crum and C. J. Willard.
1517. *Circaea lutetiana* L. Common Enchanter's-nightshade. Ridge Twp., Van Wert Co. M. B. Overholt.

1520. *Proserpinaca palustris* L. Mermaid-weed. Warren Co. Floyd Bartley and Leslie L. Pontius. Perry Twp., Stark Co. Don M. Brown.
1530. *Micrampelis lobata* (Mx.) Greene. Wild Balsam-apple. Hocking Twp., Fairfield Co. William Goslin. Putnam Co. M. B. Overholt.
1532. *Asarum canadense* L. Canadian Wild-ginger. Ridge Twp., Van Wert Co. M. B. Overholt.
1543. *Epigaea repens* L. Trailing Arbutus. Braceville Ledge, Trumbull Co. R. E. Shanks.
1579. *Phlox divaricata* L. Wild Blue Phlox. Ridge Twp., Van Wert Co. M. B. Overholt. Cliff Creek, Ross Co. Gordon S. Crowl.
1588. *Convolvulus arvensis* L. Field Bindweed. Berne Twp., Fairfield Co. William Goslin.
1590. *Convolvulus sepium* L. Hedge Bindweed. York Twp., Van Wert Co. M. B. Overholt.
1592. *Convolvulus fraterniflorus* Mack. & Bush. Short-stalked Bindweed. Berne Twp., Fairfield Co. William and Robert Goslin. Putnam Co. M. B. Overholt.
1606. *Phacelia purshii* Buckl. Pursh's Phacelia. Lancaster, Fairfield Co. William Goslin. Canton Twp., Stark Co. Don M. Brown. Pickaway Co. W. G. Stover. Adams and Scioto Co. Clyde H. Jones.
1619. *Fraxinus biltmoreana* Bead. Biltmore Ash. Adams Co. Floyd Bartley and Leslie Pontius.
1625. *Gentiana procera* Holm. Smaller Fringed Gentian. Green Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1633. *Obolaria virginica* L. Pennywort. Oxford Twp., Tuscarawas Co. Floyd Von Ohlen.
1639. *Apocynum pubescens* R. Br. Velvet Dogbane. Ridge Twp., Van Wert Co. M. B. Overholt.
1644. *Asclepias tuberosa* L. Pleurisy-root. Greenfield Twp., Fairfield Co. William Goslin.
1645. *Asclepias purpurascens* L. Purple Milkweed. Warren Co. Floyd Bartley and Leslie L. Pontius.
1646. *Asclepias incarnata* L. Swamp Milkweed. Knox Co. L. E. Yarman.
1652. *Asclepias syriaca* L. Common Milkweed. Cedar Grove School, Pickaway Co. R. A. Dobbins. Ridge Twp., Van Wert Co. M. B. Overholt.
1655. *Gonolobus laevis* Mx. Sandvine. Along Tuscarawas River, Coshocton Co. F. B. Selby.
1662. *Datura stramonium* L. Common Jimson-weed. Union Co. B. F. DeHays. Berne Twp., Fairfield Co. Robert Goslin.
1664. *Lycium halimifolium* Mill. Common Matrimony-vine. Berne Twp., Fairfield Co. William Goslin.
1666.1. *Physalis subglabrata* Mack. & Bush. Smooth Ground-cherry. Hocking Twp., Fairfield Co. Robert Goslin.
1667. *Physalis lanceolata* Mx. Prairie Ground-cherry. La Fayette Twp., Coshocton Co. F. B. Selby.
1669. *Physalis virginiana* Mill. Virginia Ground-cherry. Ridge Twp., Van Wert Co. M. B. Overholt.
1676. *Solanum carolinense* L. Horsenettle. Hocking Co. B. F. DeHays. Ridge Twp., Van Wert Co. M. B. Overholt. Fairfield Co. William and Robert Goslin.
1677. *Solanum rostratum* Dunal. Buffalo-bur. Darke Co. D. P. Miller.
1678. *Solanum nigrum* L. Black Nightshade. Cincinnati, Hamilton Co. Couradine Lene.
1682. *Verbascum blattaria* L. Moth Mullen. Ridge Twp., Van Wert Co. M. B. Overholt. Union Co. B. F. DeHays.
1684. *Verbascum thapsus* L. Common Mullen. Ridge Twp., Van Wert Co. M. B. Overholt.
1685. *Pentstemon calycosus* Small. Calycose Beard-tongue. Fort Loramie, Shelby Co. Alfred Lonsing. Bucyrus, Crawford Co. W. G. Stover.
1686. *Pentstemon digitalis* (Sweet) Nutt. Foxglove Beard-tongue. Beldon, Lorain Co. W. G. Stover.
1689. *Pentstemon hirsutus* (L.) Willd. Hairy Beard-tongue. Berne Twp., Fairfield Co. Robert Goslin.

1692. *Chelone glabra* L. Smooth Turtle-head. Madison Twp., Scioto Co. Floyd B. Chapman.
1694. *Scrophularia marylandica* L. Maryland Figwort. La Fayette Twp., Coshocton Co. F. B. Selby.
1702. *Ilysanthes dubia* (L.) Barnh. Short-stalked False Pimpernel. Lawrence Twp., Tuscarawas Co. Don M. Brown.
1711. *Agalinis purpurea* (L.) Penn. Large-flowered Agalinis. Berne Twp., Fairfield Co. Robert Goslin.
1713. *Agalinis tenuifolia* (Vahl.) Raf. Slender Agalinis. Newcastle Twp., Coshocton Co. F. B. Selby.
1726. *Veronica serpyllifolia* L. Thyme-leaf Speedwell. Ridge Twp., Van Wert Co. M. B. Overholt.
1727. *Veronica peregrina* L. Purslane Speedwell. Lancaster, Fairfield Co. William Goslin.
1728. *Veronica arvensis* L. Field Speedwell. Lancaster, Fairfield Co. William Goslin.
1730. *Veronica persica* Poir. Cats-eye Speedwell. Lodi Twp., Athens Co. Harold Moore.
1734. *Pedicularis canadensis* L. Wood Lousewort. Goodhope Twp., Hocking Co. William Goslin.
1735. *Castilleja coccinea* (L.) Spreng. Scarlet Painted-cup. Scioto Co. Clyde H. Jones.
1740. *Chaenorrhinum minus* (L.) Lange. Lesser Toadflax. Paris Twp., Stark Co. Don M. Brown.
1744. *Bignonia radicans* L. Trumpet-creeper. Ridge Twp., Van Wert Co. M. B. Overholt.
1751. *Thalesia uniflora* (L.) Britt. Naked Broom-rape. Berne Twp., Fairfield Co. William Goslin.
1753. *Conopholis americana* (L. f.) Wallr. Squaw-root. Laurel Twp., Hocking Co. Floyd Clum.
1754. *Leptamnium virginianum* (L.) Raf. Beech-drops. Ridge Twp., Van Wert Co. M. B. Overholt. Hocking Co. Floyd Clum.
1755. *Utricularia vulgaris* var. *americana* Gray. Greater Bladderwort. Ottawa Co. Dale W. Jenkins. Warren Co. Floyd Bartley and Leslie L. Pontius. Clark Twp., Coshocton Co. F. B. Selby.
1761. *Ruellia strepens* L. Smooth Ruellia. Pickaway Co. William Goslin.
1769. *Cynoglossum virginianum* L. Wild Comfrey. Greenfield Twp., Fairfield Co. Robert Goslin. Scioto Co. Clyde H. Jones.
1773. *Lithospermum arvense* L. Corn Gromwell. Berne Twp., Fairfield Co. Robert Goslin.
1775. *Lithospermum canescens* (Mx.) Lehm. Hoary Puccoon. Pleasant Twp., Clark Co. Clyde H. Jones.
1780. *Myosotis micrantha* Pall. Small-flowered Forget-me-not. Athens, Athens Co. Walter P. Porter.
1787. *Verbena urticaefolia* L. White Vervain. Berne Twp., Fairfield Co. William Goslin.
1788. *Verbena hastata* L. Blue Vervain. Falls Twp., Hocking Co. Ralph Walker. Berne Twp., Fairfield Co. William Goslin. Knox Co. L. E. Yarman.
1789. *Verbena angustifolia* Mx. Narrowleaf Vervain. Liberty Twp., Jackson Co. Floyd Bartley and Leslie L. Pontius.
1791. *Verbena bracteosa* Mx. Bracted Vervain. Green Twp., Ross Co. Floyd Bartley and Leslie L. Pontius.
1795. *Trichostema dichotomum* L. Blue-curls. Scioto Co. Floyd B. Chapman and Conrad Roth. Pleasant Twp., Clark Co. Clyde H. Jones.
1798. *Teucrium canadense* L. American Germander. Falls Twp., Hocking Co. Ralph Walker. Berne Twp., Fairfield Co. William Goslin.
1805. *Scutellaria pilosa* Mx. Hairy Skullcap. Green Twp., Adams Co. Edward S. Thomas.
1809. *Scutellaria galericulata* L. Marsh Skullcap. Warren Co. Floyd Bartley and Leslie L. Pontius.
1812. *Mentha spicata* L. Spearmint. Falls Twp., Hocking Co. Ralph Walker.
1813. *Mentha piperita* L. Peppermint. Fairfield Co. B. F. DeHays.

1814. *Mentha citrata* Ehrh. Bergamot Mint. Brady Lake, Portage Co. Don M. Brown. Falls Twp., Hocking Co. Ralph Walker.
1822. *Lycopus rubellus* Moench. Stalked Water-hoarhound. Falls Twp., Hocking Co. Ralph Walker.
1824. *Lycopus uniflorus* Mx. Northern Water-hoarhound. Brady Lake, Portage Co. Don M. Brown.
1825. *Perilla frutescens* (L.) Britt. Perilla. Franklin Co. Floyd Clum.
1826. *Collinsonia canadensis* L. Stone-root. Ross Co. Gordon S. Crowl. Also Pike Co.
1828. *Koellia flexuosa* (Walt.) MacM. Narrowleaf Mountain-mint. Knox Co. L. E. Yarman.
1835. *Cunila origanoides* (L.) Britt. American Dittany. Whiskey Run Ridge, Pike Co. Gordon S. Crowl.
1836. *Clinopodium vulgare* L. Field Basil. Falls Twp., Hocking Co. Ralph Walker.
1836.1. *Satureja acinos* (L.) Scheele. Basil Balm. Dayton, Montgomery Co. Alfred Lonsing.
1842. *Agastache nepetoides* (L.) Ktz. Catnip Giant-hyssop. La Fayette Twp., Coshocton Co. F. B. Selby.
1845. *Nepeta cataria* L. Catnip. Knox Co. L. E. Yarman. Pleasant Twp., Fairfield Co. William Goslin. Falls Twp., Hocking Co. Ralph Walker. Ridge Twp., Van Wert Co. M. B. Overholt.
1846. *Glecoma hederacea* L. Ground-ivy. Falls Twp., Hocking Co. Ralph Walker. Berne Twp., Fairfield Co. William Goslin.
1849. *Dracocephalum virginianum* L. Virginia Dragon-head. Goodhope Twp., Hocking Co. William and Robert Goslin. Courtney Hill, Athens Co. W. P. Porter and P. S. Wamsley.
1851. *Stachys palustris* L. Marsh Hedge-nettle. Falls Twp., Hocking Co. Ralph Walker. Greenfield Twp., Fairfield Co. Robert Goslin. Ridge Twp., Van Wert Co. M. B. Overholt.
1853. *Stachys aspera* Mx. Rough Hedge-nettle. York Twp., Van Wert Co. M. B. Overholt.
1854. *Stachys cordata* Ridd. Cordate Hedge-nettle. Tuscarawas Twp., Coshocton Co. F. B. Selby.
1856. *Leonurus cardiaca* L. Common Motherwort. Falls Twp., Hocking Co. Ralph Walker. Greenfield Twp., Fairfield Co. William Goslin.
1857. *Lamium album* L. White Henbit. Franklin Co. A. E. Waller.
1858. *Lamium amplexicaule* L. Common Henbit. Canton Twp., Stark Co. Don M. Brown. Berne Twp., Fairfield Co. Robert Goslin.
1863. *Prunella vulgaris* L. Common Self-heal. Ridge Twp., Van Wert Co. M. B. Overholt. Knox Co. L. E. Yarman. Falls Twp., Hocking Co. Ralph Walker.
1864. *Monarda didyma* L. American Beebalm. Falls Twp., Hocking Co. Ralph Walker. Louisville, Stark Co. Ted Grisez.
1867. *Monarda fistulosa* L. Wild Bergamot. Marion Prairie, Marion Co. Clyde H. Jones. Vinton Co. William Goslin.
1868. *Monarda mollis* L. Canescent Wild Bergamot. Mantua, Portage Co. Don M. Brown. York Twp., Van Wert Co. M. B. Overholt.
1869. *Blephilia ciliata* (L.) Raf. Downy Blephilia. Deercreek Twp., Pickaway Co. Floyd Bartley and Leslie L. Pontius.
1870. *Blephilia hirsuta* (Pursh) Torr. Hairy Blephilia. Berne Twp., Fairfield Co. William Goslin.
1871. *Salvia lyrata* L. Lyreleaf Sage. Adams Co. Clyde H. Jones.
1875. *Salvia officinalis* L. Common Sage. Falls Twp., Hocking Co. Ralph Walker.
1877. *Phryma leptostachya* L. Lopseed. Falls Twp., Hocking Co. Ralph Walker.
1880. *Plantago aristata* Mx. Large-bracted Plantain. Jackson Twp., Perry Co. William Goslin. Lancaster, Fairfield Co. Robert Goslin.
1881. *Plantago purshii* R. & S. Pursh's Plantain. Lucas Co. Floyd Bartley and Leslie L. Pontius.
1882. *Plantago rugelii* Dcne. Rugel's Plantain. Marion Prairie, Marion Co. Clyde H. Jones.

1885. *Plantago virginica* L. Dwarf Plantain. Adams and Scioto Co. Clyde H. Jones.
1889. *Aralia nudicaulis* L. Wild Sarsaparilla. Hocking Co. B. F. DeHays. Clark Twp., Coshocton Co. F. B. Selby.
1891. *Panax trifolium* L. Dwarf Ginseng. Clark Twp., Coshocton Co. F. B. Selby.
1897. *Sanicula canadensis* L. Short-styled Snakeroot. Ridge Twp., Van Wert Co. M. B. Overholt.
1898. *Sanicula trifoliata* Bickn. Large-fruited Snakeroot. Paris Twp., Stark Co. Don M. Brown.
1899. *Daucus carota* L. Wild Carrot. Knox Co. L. E. Yarman.
1902. *Deringa canadensis* (L.) Ktz. Honewort. Ridge Twp., Van Wert Co. M. B. Overholt.
1904. *Washingtonia claytoni* (Mx.) Britt. Woolly Sweet-cicely. Cars Run, Pike Co. Gordon S. Crowl. Berne Twp., Fairfield Co. William Goslin.
1905. *Washingtonia longistylis* (Torr.) Britt. Long-styled Sweet-cicely. Canton Twp., Stark Co. Don M. Brown.
1907. *Thaspium trifoliatum* (L.) Britt. Purple Meadow-parsnip. Berne Twp., Fairfield Co. William Goslin.
1908. *Thaspium barbinode* (Mx.) Nutt. Hairy-jointed Meadow-parsnip. Berne Twp., Fairfield Co. Robert Goslin.
1909. *Thaspium pinnatifidum* (Buckl.) Gray. Cut-leaf Meadow-parsnip.
1912. *Pastinaca sativa* L. Garden Parsnip. Ridge Twp., Van Wert Co. M. B. Overholt. Berne Twp., Fairfield Co. William Goslin.
1914. *Heracleum lanatum* Mx. Cow-parsnip. Berne Twp., Fairfield Co. William Goslin.
1919. *Zizia aurea* (L.) Koch. Early Meadow-parsnip. Berne Twp., Fairfield Co. William Goslin.
1920. *Zizia cordata* (Walt.) DC. Heartleaf Meadow-parsnip. Bass Island, Ottawa Co. Edward S. Thomas. Madison Twp., Fairfield Co. Gene Rea.
1921. *Taenidia integerrima* (L.) Drude. Yellow Pimpernel. Canton Twp., Stark Co. Don M. Brown.
1926. *Sium cicutaefolium* Schrank. Water-parsnip. Warren Co. Floyd Bartley and Leslie L. Pontius.
1929. *Cicuta maculata* L. Spotted Water-hemlock. Hocking Co. William Goslin.
1940. *Cornus stolonifera* Mx. Red-osier Dogwood. Berne Twp., Fairfield Co. William, Robert and Charles Goslin.
1941. *Cynoxylon floridum* (L.) Raf. Flowering Dogwood. Athens, Athens Co. Warren Abbott.
1944. *Houstonia caerulea* L. Bluets. Washington Twp., Holmes Co. John H. Schaffner.
1951. *Cephalanthus occidentalis* L. Buttonbush. Ridge Twp., Van Wert Co. M. B. Overholt.
1954. *Diodia teres* Walt. Rough Buttonweed. Ross-Hocking Park, Ross Co. William Goslin.
1958. *Galium circaezans* Mx. Wild Licorice. Madison Twp., Fairfield Co. Edward S. Thomas and Charles E. Walker.
1960. *Galium aparine* L. Common Cleavers. Ridge Twp., Van Wert Co. M. B. Overholt. Pleasant Twp., Fairfield Co. William Goslin.
1965. *Galium concinnum* T. & G. Shining Bedstraw. Pleasant Twp., Fairfield Co. William Goslin.
1966. *Galium claytoni* Mx. Clayton's Bedstraw. Berne Twp., Fairfield Co. William Goslin.
1969. *Sambucus canadensis* L. Common Elderberry. Lancaster, Fairfield Co. William Goslin.
1970. *Sambucus racemosa* L. Red Elderberry. Paris Twp., Stark Co. Don M. Brown.
1972. *Viburnum acerifolium* L. Maple-leaf Arrow-wood. Jackson Twp., Perry Co. William Goslin.
1980. *Viburnum cassinoides* L. Withe-rod. Ridge Twp., Van Wert Co. M. B. Overholt.

1982. *Viburnum prunifolium* L. Black Haw. Union Co. B. F. DeHays. Greenfield Twp., Fairfield Co. William Goslin. Greene Twp., Adams Co. Edward S. Thomas.
1985. *Triosteum aurantiacum* Bickn. Scarlet-fruited Horse-gentian. Knox Co. L. E. Yarman.
1988. *Symphoricarpos symphoricarpos* (L.) Macm. Coralberry. Flint Ravine, Franklin Co. William Goslin.
1989. *Lonicera tatarica* L. Tartarian Honeysuckle. Escaped from cultivation in Louisville, Stark Co. Ted Grisez.
1993. *Lonicera japonica* Thunb. Japanese Honeysuckle. Berne Twp., Fairfield Co. William Goslin.
1994. *Lonicera sempervirens* L. Trumpet Honeysuckle. Greenfield Twp., Fairfield Co. Robert Goslin.
1997. *Lonicera glaucescens* Rydb. Glaucescent Honeysuckle. South Bass Island, Ottawa Co. Edward S. Thomas. Cliff Creek, Ross Co. Gordon S. Crowl.
2004. *Valerianella radiata* (L.) Dufr. Beaked Corn-salad. Berne Twp., Fairfield Co. William Goslin.
2014. *Specularia perfoliata* (L.) A. DC. Venus'-looking-glass. Falls Twp., Hocking Co. Ralph Walker.
2015. *Lobelia cardinalis* L. Cardinal Lobelia. Clark Twp., Coshocton Co. F. B. Selby. Adams Co. Clyde H. Jones.
2016. *Lobelia syphilitica* L. Blue Lobelia. Falls Twp., Hocking Co. Ralph Walker. Knox Co. L. E. Yarman. Adams Co. and Marion Prairie, Marion Co. Clyde H. Jones.
2017. *Lobelia puberula* Mx. Downy Lobelia. Scratch Hollow, Pike Co. Gordon S. Crowl.
2022. *Dipsacus sylvestris* Huds. Wild Teasel. Ridge Twp., Van Wert Co. M. B. Overholt. Knox Co. L. E. Yarman.
2027. *Ambrosia trifida* L. Giant Ragweed. Pleasant Twp., Clark Co. and Marion Prairie, Marion Co. Clyde H. Jones.
2029. *Ambrosia elatior* L. Roman Ragweed. Knox Co. L. E. Yarman.
2030. *Heliopsis helianthoides* (L.) Sw. Smooth Oxeye. Putnam Co. M. B. Overholt.
2031.2. *Golinsoga ciliata* (Raf.) Blake. Galinsoga. Lancaster, Fairfield Co. William Goslin. Knox Co. L. E. Yarman.
2033. *Rudbeckia hirta* L. Black-eyed-Susan. Marion Prairie, Marion Co. Clyde H. Jones.
2036. *Rudbeckia sullivanti* Boynt. & Bead. Sullivant's Cone-flower. Harmony Twp., Clark Co. Edward S. Thomas.
2037. *Rudbeckia umbrosa* Boynt. & Bead. Woodland Cone-flower. Alfred Lonsing.
2039. *Rudbeckia laciniata* L. Tall Cone-flower. Putnam Co. M. B. Overholt. Ross and Pike Co. Gordon S. Crowl. Berne Twp., Fairfield Co. William Goslin.
2039a. *Rudbeckia laciniata* var. *hortensia* Bail. Golden-glow. Vienna, Clinton Co. Katie M. Roads.
2040. *Echinacea purpurea* (L.) Moench. Purple Cone-flower. Scioto Co. Clyde H. Jones.
2043. *Helianthus microcephalus* T. & G. Small Wood Sunflower. Berne Twp., Fairfield Co. William Goslin.
2045. *Helianthus giganteus* L. Giant Sunflower. Madison Twp., Scioto Co. Conrad Roth.
2052. *Helianthus divaricatus* L. Woodland Sunflower. Berne Twp., Fairfield Co. William Goslin.
2064. *Helianthus annuus* L. Common Sunflower. Hocking Twp., Fairfield Co. Robert Goslin.
2068. *Ridan alternifolius* (L.) Britt. Ridan. Clear Creek, Hocking Co. Edward S. Thomas. Berne Twp., Fairfield Co. Robert and William Goslin.
2072. *Bidens laevis* (L.) B. S. P. Smooth Bur-marigold. Pleasant Twp., Fairfield Co. William Goslin.
2075. *Bidens coronata* (L.) Britt. Tall Tickseed. Madison Twp., Scioto Co. Conrad Roth. Greenfield Twp., Fairfield Co. Robert Goslin.

2080. *Bidens bipinnata* L. Spanish-needles. La Fayette Twp., Coshocton Co. F. B. Selby. Nile Twp., Scioto Co. Conrad Roth. Lancaster, Fairfield Co. Robert Goslin.
2083. *Coreopsis tripteris* L. Tall Tickseed. Whiskey Run, Pike Co. Gordon S. Crowl.
2088. *Polymnia canadensis* L. Small-flowered Leaf-cup. Lebanon, Warren Co. Eugene Good and Charles Dambach.
2095. *Silphium terebinthinaceum* Jacq. Prairie-dock. Warren Co. Floyd Bartley and Leslie L. Pontius.
2096. *Helenium autumnale* L. Common Sneezeweed. Berne Twp., Fairfield Co. William and Robert Goslin.
2106. *Gnaphalium obtusifolium* L. Fragrant Cudweed. Knox Co. L. E. Yarman.
2109. *Gnaphalium purpureum* L. Purplish Cudweed. Paris Twp., Stark Co. Don M. Brown.
2110. *Anaphalis margaritacea* (L.) Benth. & Hook. Pearly Everlasting. Mantua Portage Co. Don M. Brown.
2114. *Antennaria neodioica* Greene. Smaller Everlasting. Madison Twp., Scioto Co. Floyd B. Chapman and Conrad Roth.
2115. *Antennaria neglecta* Greene. Field Everlasting. Berne Twp., Fairfield Co. Robert Goslin.
2118. *Chrysopsis mariana* (L.) Ell. Maryland Golden-aster. Huntington Twp., Gallia Co. Clyde H. Jones.
2120. *Solidago bicolor* L. White Goldenrod. Adams Co. Clyde H. Jones.
2121. *Solidago hispida* Muhl. Hairy Goldenrod. Berne Twp., Fairfield Co. Robert Goslin.
2122. *Solidago flexicaulis* L. Zig-zag Goldenrod. Adams Co. Clyde H. Jones.
2123. *Solidago caesia* L. Wreath Goldenrod. Eden Twp., Licking Co. Warren Abbott.
2127. *Solidago speciosa* Nutt. Showy Goldenrod. Nile Twp., Scioto Co. Floyd B. Chapman.
2130. *Solidago canadensis* L. Canada Goldenrod. Eden Twp., Licking Co. Warren Abbott.
2132. *Solidago rugosa* Mill. Wrinkled-leaf Goldenrod. Scioto Co. Clyde H. Jones.
2133. *Solidago patula* Muhl. Roughleaf Goldenrod. Eden Twp., Licking Co. Warren Abbott.
2134. *Solidago ulmifolia* Muhl. Elmleaf Goldenrod. Eden Twp., Licking Co. Warren Abbott.
2152. *Aster cordifolius* L. Common Blue Wood Aster. Greenfield Twp., Fairfield Co. Robert Goslin.
2153. *Aster lowrieanus* Port. Lowrie's Aster. Licking Co. A. E. Waller.
2160. *Aster novae-angliae* L. New England Aster. Old Man's Cave, Hocking Co. W. G. Stover.
2162. *Aster phlogifolius* Muhl. Thinleaf Purple Aster. Adams Co. Clyde H. Jones.
2169. *Aster vimineus* Lam. Small White Aster. Madison Twp., Scioto Co. Floyd B. Chapman and Conrad Roth.
2176.1. *Aster pilosus* Willd. Jackson Twp. Stark Co. Don M. Brown.
2179. *Erigeron philadelphicus* L. Philadelphia Fleabane. Berne Twp., Fairfield Co. William Goslin. Athens, Athens Co. and Lawrence Co. Warren Abbott. Ridge Twp., Van Wert Co. M. B. Overholt.
2180. *Erigeron ramosus* (Walt.) B. S. P. Daisy Fleabane. Madison Twp., Scioto Co. Floyd B. Chapman and Conrad Roth.
2181. *Erigeron annuus* (L.) Pers. White-top Fleabane. Berne Twp., Fairfield Co. Robert Goslin.
2182. *Leptilon canadense* (L.) Britt. Common Horseweed. Greenfield Twp., Fairfield Co. William Goslin.
2187. *Eupatorium maculatum* L. Spotted Joe-Pye-weed. Berne Twp., Fairfield Co. William and Robert Goslin. Mantua Portage Co. Don M. Brown.
2188. *Eupatorium purpureum* L. Purple Joe-Pye-weed. Berne Twp., Fairfield Co. William, Charles and Robert Goslin.
2190. *Eupatorium altissimum* L. Tall Thoroughwort. Pleasant Twp., Clark Co. Clyde H. Jones.

2191. *Eupatorium sessilifolium* L. Upland Boneset. Tiverton Twp., Coshocton Co. F. B. Selby.
2194. *Eupatorium urticaefolium* Reich. White Snake-root. Berne Twp., Fairfield Co. William Goslin.
2195. *Eupatorium aromaticum* L. Smaller Snake-root. Hocking Twp., Fairfield Co. William Goslin.
2201. *Lacinaria scariosa* (L.) Hill. Large Blazing-star. Muskingum Co. Floyd VonOhlen.
2202. *Lacinaria spicata* (L.) Ktz. Dense Blazing-star. Liberty Twp., Jackson Co. Floyd Bartley and Leslie L. Pontius.
2204. *Vernonia altissima* Nutt. Tall Ironweed. Knox Co. L. E. Yarman. Berne Twp., Fairfield Co. William Goslin.
2212. *Achillea millefolium* L. Common Milfoil. Hocking Co. B. F. DeHays.
2213. *Chrysanthemum leucanthemum* L. Oxeye Daisy. Knox Co. L. E. Yarman. Berne Twp., Fairfield Co. William Goslin.
2220. *Tanacetum vulgare* L. Common Tansy. Old Man's Cave, Hocking Co. W. G. Stover.
2234. *Senecio plattensis* Nutt. Prairie Squaw-weed. Winesburg, Holmes Co. Don M. Brown. Peach Point, Ottawa Co. Edward S. Thomas.
2237. *Mesadenia atriplicifolia* (L.) Raf. Pale Indian-plantain. Greenfield Twp., Fairfield Co. William and Robert Goslin.
2238. *Mesadenia tuberosa* (Nutt.) Britt. Tuberous Indian-plantain. Warren Co. Floyd Bartley and Leslie L. Pontius.
2239. *Erechtites hieracifolia* (L.) Raf. Fireweed. Keene Twp., Coshocton Co. F. B. Selby.
2246. *Cirsium altissimum* (L.) Spreng. Tall Thistle. La Fayette Twp., Coshocton Co. F. B. Selby. Berne Twp., Fairfield Co. William Goslin. Cutler, Washington Co. W. P. Porter.
2266. *Cynthia virginica* (L.) D. Don. Virginia Cynthia. Vinton Co. William Goslin. Scioto Co. Clyde H. Jones.
2270. *Apargia autumnale* (L.) Hoffm. Fall Hawkbit. Medina Co. Fred H. Norris.
2277. *Hieracium gronovii* L. Gronovius' Hawkweed. Jackson Twp., Perry Co. William Goslin.
2282. *Hieracium pratensis* Tausch. Field Hawkweed. Madison Twp., Fairfield Co. Edward S. Thomas and Charles E. Walker.
2289. *Nabalus asper* (Mx.) T. & G. Rough Rattlesnake-root. Berne Twp., Fairfield Co. William and Robert Goslin.
2304. *Lactuca canadensis* L. Tall Yellow Lettuce. Hickson Run, Pike Co. Gordon S. Crowl.
2307. *Lactuca saligna* L. Willow Lettuce. Carroll, Fairfield Co. William Goslin.
2308. *Lactuca virosa* L. Prickly Lettuce. Union Co. B. F. DeHays. Lancaster, Fairfield Co. William Goslin. Knox Co. L. E. Yarman.
2309. *Leontodon taraxacum* L. Dandelion. Lancaster, Fairfield Co. William Goslin.

BOOK NOTICES

More Biological Symposia

This second volume puts into print addresses on Speciation, Defense Mechanisms in Plants and Animals, The Biological Basis of Social Problems, and Regeneration. In the section on speciation, Hebbs reports that the results of experimental hybridization in fish conform to Galtonian rather than to Mendelian genetics. He believes that the environment has an effect in producing characteristics associated with different living conditions. For example, concerning blind cave fish he says, "Something that is inherent in life in absolute darkness not only permits but forces the degeneration of the eyes and of pigment." In contrast, Dice states from his work on Peromyscus the more generally accepted view that "the variability of species and subspecies, at least in mammals, is not primarily due to direct influence of the environment upon the individual animals, but is based upon variations in heredity." As there is good evidence that some subspecies of

Peromyscus had a polyphyletic origin it is suggested that a subspecies should be considered an ecologic trend in place of the current concept of a subspecies as a unit of descent. Among other chapters in this section is a mathematical treatment by Sewell Wright.

The three chapters on defense mechanisms deal with local responses to parasites, immunity to viruses, and reactions to injected foreign substances.

Regeneration in the annelids occurs in different ways in different genera. In some genera where neoblasts are plentiful head regeneration does not occur while in others head regeneration does occur without involving neoblasts. It seems that regeneration is not accomplished from undifferentiated embryonic cells but from dedifferentiated tissue cells.

The lectures on the biological basis of social problems contain much that is controversial. The opening chapter is a denial of religion. In another chapter the "ethics of enmity" is described as a useful instrument in evolution in a world where there are so many creatures whose interests are essentially antagonistic. When applied to human behavior serious objection may be made to the comparison presented of defensive warfare to defense from a pack of wolves. The chapter on A Biologist's Appreciation of Religion as a Factor in Social Evolution closes with two suggestions for the "secularization of morals." Of one the author says it "might work, but I am afraid that it will not," and of the other that it is "contrary to the American idea of personal freedom." This is the dilemma of a people who "break away from the teachings of religion and permit their morality to become as lax as ours has become."—*B. Davidheiser.*

Biological Symposia, volume II, edited by Jaques Cattell. Lancaster, Penn., The Jaques Cattell Press. 1941. $2.50.

Birding Along the Maine Coast

This fascinating book by the wife of one of the country's leading ornithologists is an account of first-hand experiences with the oceanic birds that breed on the rocky islands off the Maine coast. It not only contains a great deal of information about the life history and habits of these birds, but is full of vivid anecdotes on the trials and tribulations of a field ornithologist. The reader will not get far in the book before he will begin to share the author's enthusiasm, and will almost see, hear, and smell the scenes described.

The book tells of the author's early interests and experiences in bird study, and of her trips with her husband to various islands off the Maine coast to study and photograph puffins, petrels, cormorants, gulls, terns, great blue herons, ospreys, and other birds. Most of these studies were made in the vicinity of Muscongus Bay, Maine, and near the mouth of the Bay of Fundy. The Cruickshanks have spent the past five summers at the Audubon Nature Camp, located in Muscongus Bay, where Mr. Cruickshank is instructor in bird study and Mrs. Cruickshank is camp photographer.

Throughout the book the reader can feel the author's deep interest in birds and conservation. She describes some of the work that is being done for the protection of the birds along the Maine coast, and the results that have been obtained. Though not obviously so, the book is an eloquent appeal for the conservation of these oceanic birds.

That the attempts of the Cruickshanks to secure good bird pictures were successful is attested by the fifty photographs which illustrate the book. These photographs, by Allan D. Cruickshank, are among the finest of hundreds he has taken. They are for the most part excellently reproduced, though the gannet picture opposite page 114 seems a rather poor reproduction of a very striking photograph. The illustrations would probably be more effective if they were better distributed through the book. The only picture of the author appears between pp. 50 and 51, where she is shown holding a gull about to be banded.

This is a book which everyone interested in birds or the out-of-doors will greatly enjoy.—*D. J. Borror.*

Bird Islands Down East, by Helen Gere Cruickshank. xii plus 123 pp. New York, The Macmillan Company. 1941. $2.50.